

***SUMMARY DATA FROM THE SPORT FISHERY FOR
PACIFIC HALIBUT IN THE IPHC AREA 2C PORTION OF
SOUTHEAST ALASKA, 2004***



by:

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INTRODUCTION

Sport fishing for Pacific halibut (*Hippoglossus stenolepis*) (herein referred to as halibut) in Southeast Alaska is an important recreational activity for resident and non-resident anglers alike. Sport harvests of halibut in the region rapidly increased in the late 1980s to mid-1990s as a result of continued increases in targeted effort. As the effort for this species continues to increase, an increasing demand is placed on managers to ensure the stocks can support exploitation by sport, subsistence, and commercial user groups. Surveys conducted by the Alaska Department of Fish and Game (ADF&G) Division of Sport Fish in Southeast Alaska collects some of the needed information from sport anglers returning from fishing trips. This information is compiled and presented to various managers who monitor the status of these stocks. The surveys occur in the area defined by the International Pacific Halibut Commission (IPHC) as Regulatory Area 2C (this area excludes the Yakutat area of Southeast Alaska, which is a portion of IPHC Regulatory Area 3A) (Figure 1). The following report provides a summary of data collected during the 2004 season by ADF&G creel survey staff, and contains some historical trends from data collected in selected ports representative of Area 2C. Sport harvest summary information for the Yakutat area (IPHC Regulatory Area 3A) is compiled and presented by ADF&G Southcentral Region staff. All 2004 data summaries published in this report should be considered preliminary.

METHODS

Two survey methodologies are employed by ADF&G to evaluate marine sport harvests of numerous fish species (including halibut) in Southeast Alaska: the annual Statewide Harvest Mail Survey (SWHS) and on-site (creel and catch sampling) surveys. Both survey types were vital to capturing the data presented in this report. The ADF&G mandatory saltwater charter vessel logbook program, initiated in 1998, discontinued the collection of halibut data in 2002. Dean and Howe (1999) and Dean (2001) presented brief summaries of preliminary results from the 1998 and 1999 logbook programs.

Statewide Harvest Mail Survey (SWHS)

The SWHS has occurred annually since 1977. The survey is questionnaire-based and includes estimates for 8 primary areas in Southeast Alaska, of which 7 fall into IPHC Area 2C, and the 8th being Yakutat which is in IPHC Area 3A (Figure 1). Although much of the outer coast of the Glacier Bay area (area G) is north of Cape Spencer and therefore in Area 3A, very little sport harvest is taken in this area and therefore all harvest in the Glacier Bay area is assigned to IPHC Area 2C. In 2000, SWHS area G (Glacier Bay) was enlarged to now include all of Icy Strait and Cross Sound, and thus the southern sections of these latter two water bodies are no longer included in SWHS area D (Sitka) (Figure 1).

Surveys are mailed to a random sample of anglers (both resident and non-resident) purchasing an Alaska sport fishing license in a given year. The survey is designed to obtain fishing activity by all household members. Individuals failing to respond to a first mailing are mailed a second form within a month of the first. Those individuals still not responding after two mailings are mailed a third and final form. Estimates of effort and harvest are determined from the responses, and final estimates are corrected to account for non-response bias. Results from this survey serve as the official and final estimates of harvest and effort for saltwater and freshwater sport fisheries within the State of Alaska. Note that the SWHS harvest estimates from 1996 to 1998 were revised in September 2000 (Howe et al. 2001 a-c). Statewide Harvest Mail Survey estimates for 2004 will not be available until mid to late 2005.

On-site (Creel and Catch Sampling) Surveys

On-site surveys occurred in 9 primary communities in IPHC Area 2C, and varied in duration and type based on data collection needs of managers. Creel surveys in Juneau, Ketchikan, and Sitka began in late April and continued through late September 2004. The surveys were designed such that they enable managers to make in-season estimates of the sport fish harvests in local areas. Additionally, catch sampling programs were in

place in Craig, Klawock, Petersburg, Wrangell, Gustavus, and Elfin Cove (added in 2003) from May or June to September, where similar types of data were collected from returning anglers, but were designed in a way that did not allow for direct in-season estimates of harvests. During the 2003 season the length and effort data was collected in Elfin Cove (Glacier Bay Area) as part of a graduate student project and was combined with data gathered in Gustavus. Sampling in Elfin Cove in 2003 followed the guidelines established by ADF&G for sport fish sampling. During the 2004 season, the catch sampling program in Elfin Cove was an ADF&G funded, staffed, and managed project. At all sampled ports in 2004, returning anglers were interviewed by ADF&G personnel, and queried for the following information: the type of trip (non-charter vs. charter); charter vessel ADF&G number if a sport fishing charter trip, the type of species targeted during the trip (bottomfish vs. salmon, etc.); the number of rods fished during the trip; the total time (hours) spent fishing on the trip; the length of the trip (if more than 1 day); the area(s) fished during the trip; and the species composition of the catch (by the numbers kept and released). Other data collected during 2004 surveys included the number of halibut cleaned-at-sea versus brought back to dock whole/intact.

Analysis of Historical Trends in HPUE, Harvest, and Effort

Estimates of halibut harvest per angler-hour of effort (HPUE) were computed from on-site survey data dating from 1988 to 2004, and results were used to compare present and historical levels of angler success. Data from each port were separated into two classes--charter and non-charter. Only survey data from the beginning of June through the end of August were used for this computation. Average rates of retention by the two classes were computed by dividing the total number of halibut kept by the total halibut captured (the sum of the number kept and the number released) for the duration of the described period.

Analysis of Possible Localized Depletion in the Juneau Fishery

Juneau on-site survey data were used to evaluate trends in HPUE by area as an indicator of possible localized depletion effects due to the large amount of targeted effort in the area and a limited number of productive halibut fishing areas close to port. Only survey data from the beginning of June to the end of August were used, and only non-charter data were selected for analysis. This was done to remove any potential bias arising from pooling the charter fleet data (which typically had much higher HPUE than non-charter trips) with non-charter data during the selected time period. Individual creel survey responses were recorded based on pre-defined harvest areas. To increase sample sizes, "aggregated" areas were developed (Figure 2). Two larger units defined geographically separated outside and inside units, and 4 smaller sub-units within each larger unit were defined as north, south, central, and west. The on-site survey areas were combined into the larger sampling areas based on their geographic location, and proximity to the defined "aggregates." We also examined past creel survey estimates of halibut harvest and bottomfishing effort in the Juneau area.

Charter Vessel Licensing and Activity

All charter vessel owners are required by State regulation to license their vessels annually with the Commercial Fisheries Entry Commission. Part of this licensing process requires the owner to record the primary port where the vessel is based. The database used for registrations from 1998 to 2004 was different from those used for prior years due to changes in agency reporting requirements. Therefore, registrations from 1998 to 2004 are not comparable to those for prior years. When a charter vessel was encountered during onsite interviews, the vessel license number was recorded in the respective field on the datasheet. The following information was compiled at the end of the season into a separate database: a) the sampled port and date; b) the vessel number; and c) the type of fishing conducted during that particular trip (bottomfish, salmon, or both).

Biological Data

Length data were collected during on-site surveys when time and accurate representation of the halibut catch allowed--the latter being of primary importance to avoid sample bias. This bias could easily happen within the charter fleet, as many clients want to have photographs taken with their larger "prize" fish once back at the dock. Due to lack of deck space and distance back to port, the smaller halibut observed by survey personnel have sometimes already been "Cleaned at Sea" (CAS) prior to docking. Therefore, length data was collected only when all the halibut aboard the vessel were still intact (none of the harvest was butchered or fletched) prior to returning to port. All lengths (tip of snout to fork of tail) were measured to the nearest centimeter (cm), and the area of harvest was recorded. Biological sampling from 1998 to 2004 also captured the type of trip (charter vs. private) to estimate class-specific statistics. All data sheets were digitized and edited, and net (headed and eviscerated) weights were estimated in pounds (lb) from the length-weight relationship published by Clark (1992). Due to the close proximity of Petersburg and Wrangell, length data collected from these two ports were combined prior to computing average weights. Similarly, length data from Craig was combined with Klawock, and Gustavus with Elfin Cove.

RESULTS

Regional Sport Harvests of Pacific Halibut from 1977 to 2003

The Statewide Harvest Mail Survey (SWHS) provides the official harvest estimates for all sport fisheries in the state of Alaska, including Pacific halibut (Howe et al. 2001 a-d, Walker et al. 2003, Jennings et al. 2004, Jennings et al. *In prep a-b*). Seven areas in Southeast Alaska are included in IPHC Area 2C. The overall harvest in 2003 was 119,481 halibut, which was 14% above the 2002 harvest and the record high harvest for period 1977-2003 (Table 1). Area specific comparisons of harvests between 2002 and 2003 indicate declining harvests in three out of the seven areas, with the Ketchikan area being down 18%, the greatest decline in any of the 7 SWHS areas in Area 2C. The Haines/Skagway area harvest declined by 7%, while the Prince-of-Wales Island area harvest was down 5% from 2002. Harvest increased from the previous year in the following areas: Glacier Bay area up 38%, Juneau area up by 31%, Sitka up by 29%, and Petersburg/Wrangell up by 12%. In 2003, harvests from the three outer coast areas of Sitka, Prince of Wales Island, and Glacier Bay accounted for 68% of the overall sport harvest in IPHC Area 2C, up slightly from the 67% of the total harvest in 2002 (Figure 3). Since 1991, the combined halibut harvest has been greater in the outer coast areas than inner coast areas, and in recent years the difference has been significant. Combined sport harvest totals from the outer coastal areas (Sitka, Prince of Wales Island, and Glacier Bay) reached a record of 81,436 halibut in 2003, and was an increase of 16% from 2002. The great increases in the harvest from the outer coastal areas since 1987 can be attributed to increased effort and harvest by charter anglers. Outer coast harvests had remained at approximately 10,000 fish per year from 1980-1987. While the combined inner coast harvest of approximately 38,045 halibut in 2003 was up 11% from 2002, it was down 7% from the 40,766 halibut harvested in 2000. The combined harvests of halibut from the inner coastal areas (Juneau, Ketchikan, Petersburg/Wrangell, and Haines/Skagway) have increased only slightly since 1987, ranging from 30,700 to 46,400 halibut per year.

On-site (Creel) Survey Summaries of HPUE Trends, Harvest, and Effort

Craig and Klawock (West Coast of Prince of Wales Island Area)

Survey data were available to compute comparative HPUE rates for 1992 and from 1994 to 2004 only. Also, a number of charter vessels in Craig began landing clients and their harvest at private docking facilities not accessible by our survey staff during 1997. Therefore, estimates of HPUE for the charter fleet from 1997 to 1998 were not as well estimated as they had been in prior years. In 1999, sampling efforts were expanded to nearby Klawock in an effort to increase survey data for the expanding West Coast of Prince of Wales Island sport fishery.

During 2004, the charter HPUE rate of 0.611 was 4% lower than 2003, and was 39% lower than 2002's record high HPUE of 1.009. The non-charter HPUE of 0.210 increased 21% from 2003, and was down by 23% from 2002's high of 0.274 (Figure 4). Compared to the recent 5-year average from 1999 to 2003, chartered and non-chartered HPUE for 2004 is down by 17% and 1%, respectively. During 2001 and 2002, the charter HPUE in the Craig/Klawock area peaked, and since then the charter HPUE has remained at levels of 0.61 to 0.64. Compared to last year, both chartered and non-chartered anglers from Craig/Klawock retained a higher percentage of 80% and 73% of their catch, respectively. In comparison to the other major ports, Craig charter anglers had the highest semi-monthly HPUE, while HPUE levels for non-chartered anglers were the fourth highest in the region (Figure 5). The HPUE for the charter fishery peaked in early July, declined significantly in late July, and then rose slightly again in late August. In contrast, the non-charter HPUE rose slowly during early June to mid-July, declined in late July, and then rose and fell slightly in the month of August.

Ketchikan

The HPUE for both chartered and non-chartered anglers in the Ketchikan area was the lowest of the all the surveyed ports. Charter angler HPUE was 13% below the recent five-year average of 0.291 (Figure 6). Ketchikan's non-chartered angler HPUE was 0.145 or 3% higher than last years rate 0.141 and the second highest HPUE since the survey began in 1988. During the period from 1988-2004, the charter HPUE has ranged from 0.15 to 0.38. As in previous years, chartered anglers harvested halibut at nearly twice the rate of non-chartered anglers. Charter anglers also retained more of their catch (81%) compared to the non-chartered anglers (77%). Retention rates for non-chartered anglers have been trending downward since 1999, while retention rates for chartered anglers in Ketchikan have been declining since 2000, even though both non-charter and charter retention rates are up 15% and 11% from 2003, respectively. Ketchikan's semi-monthly HPUE for non-chartered anglers peaked in the first half of June and slowly declined the rest of the season (Figure 5). Ketchikan's charter HPUE peaked in late June and then again in late August.

Preliminary creel survey data indicate that during 2004, the estimated total targeted effort (charter and non-charter) for halibut in the Ketchikan area was 2% below the recent five-year average, while the total number of kept halibut was up 4%. The charter fleet accounted for 22% of the total bottomfishing effort and 33% of the sport harvest of halibut in 2004, while in 2003 the charter fleet accounted for 28% of the bottomfish effort and 42% of the halibut harvest.

Sitka

Consistent survey data in Sitka is available only from 1992 to 2004; therefore, HPUE is not presented for the years from 1988 to 1991. Limited data are available from 1988 to 1989, but not presented. HPUE rates for both chartered and non-chartered halibut anglers steadily decreased from 1992 to 1996, but since then have been on the rise (Figure 7). During 2004, the HPUE for non-chartered anglers was up 29% from 2003, while the HPUE for chartered anglers decreased by 22%.

Chartered anglers in Sitka were nearly twice as successful per angler-hour fished than non-charter anglers. The retention rate for non-chartered anglers was 86%, up from 75% last year and the five-year average of 78%. The retention rate for chartered anglers was 88%, up from 82% last year and above the five-year average of 76%. Sitka continued to be second only to Craig for the highest regional semimonthly HPUE for chartered anglers (Figure 5). The charter angler HPUE increased as the season progressed, and peaked in late July. Sitka's non-charter HPUE rates peaked in early July and were second only to those from the Gustavus/Elfin Cove area. During 2004, the non-charter and charter HPUE was 29% above and 16% below the recent five-year average, respectively.

Creel survey estimates indicate that total bottomfishing effort in Sitka increased 18%, and the preliminary harvest decreased 3% from 2003. The charter fleet accounted for 90% of the total bottomfishing effort in

2004 compared to 88% in 2003, and approximately 91% of the sport harvest of halibut in Sitka in 2004 compared to 94% in 2003.

Juneau

The HPUE for Juneau's non-chartered anglers was 0.173, up 14% from the 2003 season and 52% above the recent five year average, while chartered anglers had an HPUE of 0.450, up 72% from 2003 and 109% above the recent five-year average (Figure 8). Non-charter HPUE in Juneau remained fairly constant throughout the year, with a slight peak in early July. The charter HPUE varied more significantly during the season, with a peak during the month of July (Figure 5). Juneau's non-charter angler HPUE was slightly higher than Ketchikan's. Ketchikan was the only area that had a lower charter angler HPUE than Juneau. The retention rates for non-chartered and chartered anglers in Juneau during 2003 were 80% and 92%, respectively, while in 2003 the retention rates were 80% and 76%, respectively.

Preliminary 2004 estimates for total effort and harvest indicate that compared to 2003, the total targeted bottomfishing effort increased only by 1% and the estimated total harvest increased 13%. In 2004, the Juneau charter fleet accounted for about 8% of the targeted effort and 19% of the sport harvest of halibut, while in 2003 the charter fleet represented 10% of the targeted effort and harvested 19% of the halibut.

Petersburg and Wrangell

For the 2002 through 2004 season, the sampling period in Petersburg and Wrangell was extended from May to September, making comparisons with other ports possible for the entire season. Previously, Petersburg and Wrangell had abbreviated sampling seasons, usually ending in July when the Chinook salmon fishery monitoring was completed, which made comparisons difficult. The semi-monthly HPUE for non-charter anglers remained fairly constant, peaking in late July. The charter angler HPUE peaked in late June and then again in early August. The non-charter HPUE was up 11% from 2003 to 0.228, while the charter HPUE rose 4% to 0.306. The retention rate for halibut in the Petersburg/Wrangell area was the lowest of the "inside" ports at 62% for non-chartered and 46% for chartered anglers, down from 58% and 49%, respectively in 2003.

Gustavus and Elfin Cove

This was the third year of ADF&G creel sampling in Gustavus and the second at Elfin Cove. Since the two ports are close to each other, effort and length data gathered in Elfin Cove (conducted by a University of Washington graduate student and the National Park Service with ADF&G oversight during 2003 and by ADF&G during 2004) were combined with data gathered in Gustavus. Results show that the HPUE for non-chartered anglers of 0.358 was the highest in the region, up 9% from last year. The HPUE of 0.323 for chartered anglers was down 6% from 2003, and continued to be lower than other outside ports of Sitka and Craig (Figure 5). Unlike the other ports, chartered anglers had harvest rates at the same level as non-chartered anglers. This situation can be attributed to the fact that the charter anglers retained only 47% of their catch, while non-charter anglers retained 51%. For each angler group, these are the lowest retention rates in the region, indicating that anglers are participating in more catch and release halibut fishing than other areas of Area 2C.

Analysis of Possible Localized Depletion in the Juneau Fishery

For purposes of comparison, the halibut fishery around Juneau is divided into inside and outside areas, both of which are divided into 4 sub-areas (Figure 2). The HPUE for the outside area has been consistently higher than the inside area during the last 17 years from 1988 to 2004 (Figure 9). The inside area had a historical low HPUE in 1992, while the outside area experienced its lowest HPUE during 1993. Both areas had a recovering trend from 1994 to 1997, before experiencing a dramatic decline to near record lows in 1998. That decline led to three consecutive years from 1998 to 2000 where HPUE rates remained very near record low levels. The HPUE for the inside area since 2001 has been steadily increasing, while for the outside area the HPUE peaked in 2002 and has remained at approximately the same level during 2003 and 2004.

Given that changes in HPUE for the inside and outside areas have been well correlated, it seems likely that the HPUE is tracking the overall halibut abundance in the Juneau area. During 1988 to 2004, the trend for non-chartered angling trips for the four inside sub-areas generally followed the same pattern regardless of geographic location (Figure 10). All 4 sub-areas within the inside area reached lows in 1992, and all began to recover in subsequent years until the inside south sub-area declined precipitously in 1996, and was followed by inside north and inside central sub-areas in 1998, and inside west sub-area in 2002. During 2004, the HPUE increased for all the inside areas except the inside south sub-area. The HPUE for 2004 in the inside north and inside central sub-areas are the highest for each sub-area for the period 1988-2004. The HPUE within the inside west sub-area improved significantly from the previous lows during 2000-2003. All of these inside sub-areas had either equaled or exceeded historical low HPUE's prior to their recent advances. The sub-area inside-south had the second highest HPUE rate since 1995, but the HPUE for this sub-area is from a small sample size and probably does not reflect a true estimate of halibut abundance. The inside-south sub-area had insufficient data to compute a HPUE from 1990 to 1991.

Juneau's outside area non-chartered fishery was evaluated by sub-area during the same time period as the inside area (June through August) (Figure 11). Four of the sub-areas had sufficient data to evaluate historical trends. During 2004, the outside west sub-area continued its upward trend and set a record HPUE of 0.337, up 15% from last year. The HPUE for outside central (decreased 0.3%) and outside north (increased 0.8%) remained virtually the same as in 2003. The HPUE for outside-south of 0.242 was a decrease of 19% from the previous year. The outside-central, north, and west sub-areas have shown similar HPUE trends to the inside areas with historic lows in 1993, subsequent increases, and then the beginning of a decline in 1997 for the north and central sub-areas, followed by a decline in 1998 for the west sub-area. The outside north sub-area experienced an all time low HPUE in 1999. The combined HPUE for inside and outside areas has generally been trending upward since 2000.

During 2002, the total bottomfish effort in the Juneau area was at a record low 42,072 hours (Figure 12). Just ten years earlier in 1992, the amount of bottomfish effort was 84,718 hours. It was apparent that due to low abundance, Juneau area anglers were abandoning the halibut fishery. However, in 2003 and 2004, the estimated bottomfishing effort based on creel survey estimates in the Juneau area increased significantly to 60,093 hours and 60,707 hours, respectively, up 43% from 2002's record low. Compared to the recent five-year average, the targeted bottomfish effort was up 10%, but was 15% below the long-term average from 1981 to 2003. Based on the Juneau creel survey data, the 2004 estimated Juneau area halibut harvest of 11,512 fish is 18% above last year's harvest of 9,911 fish and the highest since 1997 when 12,547 halibut were harvested. The record harvest of 16,414 halibut in Juneau occurred in 1983. This year's harvest was 64% above the recent five-year average, and was 11% above the long-term average from 1981 to 2003. Due to the higher amount of effort and a higher HPUE in the Juneau sport fishery, it appears that anglers are beginning to once again target halibut on a regular basis. Given that Juneau area anglers are now traveling to remote fishing areas far more frequently than in the late 1980s, (effort from the inside area has declined from 85% to 49% of the total Juneau area bottomfish effort during the period from 1988 to 2004) there seems to be little doubt that localized depletion of stocks in Juneau's inside areas has resulted in a similar decline in bottomfish effort closer to Juneau. The fairly stable halibut harvest for the Juneau area estimated from the SWHS is likely due

to the growth in remote charter fisheries in more productive grounds (Juneau outside areas), which masks declines in the fishery closer to Juneau.

Charter Vessel Activity

This year, charter fleet registrations (according to the Commercial Fisheries Entry Commission) totaled 1,265 vessels (which includes 55 vessels in Yakutat). This is a slight 1% increase in the number of registered vessels from 2003. The total number of charter vessels registering annually with ADF&G increased steadily from 1988 to 1997 in Southeast Alaska--more than tripling during that time period (Figure 13). From 1998 to 2004, registered vessel numbers increased substantially due to a change in agency reporting requirements. Thus, the numbers are not comparable from 1988 to 1997. All vessels used in freshwater are included in the registration totals from 1998 to 2004, as well as vessels used to transport anglers to and from shore.

On-site survey data indicate that not all registered charter vessels at sampled ports were encountered by the onsite surveys, due to several possible reasons: some charter vessels used a dock or boat launch not surveyed by our samplers at a given port, used a dock or boat launch that we did survey but was never encountered during our sampling, or never actively participated in charter fishing activities. Of the 934 vessels that registered to operate in the ports sampled during 2004, only 364 or 39% of the vessels were verified as "actively" chartering during on-site surveys (Table 2). Gustavus and Elfin Cove had the highest percentage of active registered vessels 69% and 62%, respectively, while the other ports ranged from 45% active in Ketchikan to 11% active in Wrangell. Overall, on-site data indicate a decrease of 2% in the number of active charter vessels that targeted halibut during 2004. Of the 364 active charter vessels surveyed in the region during 2004, 249 (68%) targeted halibut, or both salmon and halibut on at least one of the surveyed trips.

Interview frequency of individual charter vessels increased in Sitka, Petersburg, Wrangell, Juneau, and Elfin Cove, and decreased in Ketchikan, Craig/Klawock, and Gustavus (Table 3). The number of vessels surveyed more than 4 times decreased by about 2% compared to last year. The number of these very active vessels increased in Craig/Klawock, Juneau, and Elfin Cove, remained relatively the same in Petersburg, Wrangell, and Gustavus, and decreased in Ketchikan and Sitka. In Craig, a major reduction in interview frequency per vessel occurred from 1996 to 1998 due to movement of some of the fleet to private docking facilities, rather than a decrease in vessel activity. Starting in 1999, supplemental data from charter trips surveyed in Klawock were pooled with the Craig data.

Juneau and Ketchikan charter vessels were more likely to target "salmon only" 85% and 83% of the trips, respectively (Table 4). This is likely due to the lower halibut abundance observed in these ports compared to the rest of the region combined with an abundant supply of local hatchery-produced salmon in Juneau and Ketchikan. In 2004, Petersburg charter operators continued to have "halibut only" trips about four times as often as "salmon only" trips (66% to 18%, respectively) and targeted both halibut and salmon 16% of trips. Craig/Klawock (41%), Sitka (55%), Wrangell (32%), Gustavus (49%) and Elfin Cove (72%) operators pursued both salmon and halibut on the same trip more often than operators in the rest of the region. Charter operators in Ketchikan and Juneau pursued both salmon and halibut on fewer than 10% of their trips. On a regional basis, the average relative percentage of charter trips by target during 1998 to 2004 has been 51% "salmon only" trips, 38% combination trips, and 11% "halibut only" trips (Table 4).

Biological Data

Regionwide statistics for 2004 in area 2C include an unweighted (i.e., a simple average of the collected biological data rather than a weighted average calculated by multiplying the average net weight at each SWHS area by the proportion of the regional harvest at each SWHS area) average net weight of 22.6 lb that was approximately 6% less than last year's unweighted average net weight of 24.0 lb. The unweighted average length in 2004 of 95.8 cm was 2% less than last year's unweighted average length of 97.6 cm. The unweighted average net weight in 2004 was based on 8,350 halibut measurements, 17% more than last year. While the number of halibut measured increased at nearly all the ports, most of the additional halibut

measurements were a result of the continuation of the longer sampling season in Petersburg/Wrangell combined with more samples from Craig/Klawock, Ketchikan, and Gustavus/Elfin Cove. The number of halibut sampled in Sitka decreased 50%, from 1,385 fish sampled in 2003 to 692 fish sampled in 2004. The main decline of sampled halibut in Sitka occurred with the sampled lengths from the charter anglers, as in 2003 there were 1,193 charter harvested fish sampled versus 550 fish in 2004. All length data collected during 2004 (Table 5) were used to estimate the average net weights (Table 6) from the IPHC standard linear relationship. During 2004, the waters around the Gustavus/Elfin Cove area continued to produce the largest halibut on average (34.6 lb net weight), followed by Sitka, Petersburg/Wrangell, Ketchikan, Juneau, and Craig/Klawock at (21.0, 20.5, 18.8, 18.6, and 12.1 lb, respectively). During 2004, the mean net weight decreased 12% in Petersburg/Wrangell, 3% in Gustavus, and 2% in Juneau. The average net weight of halibut in Ketchikan, Craig/Klawock, and Sitka increased by 20%, 11%, and 8%, respectively, from the previous year (Table 6). Precision goals for the average net weight estimates in each angler class were $\pm 5\%$ for charter anglers and $\pm 10\%$ for private anglers at the 90% level of confidence. This goal was achieved for the non-charter angler class at Ketchikan (RP=9%), Craig/Klawock (RP=9%), Petersburg/Wrangell (RP=5%), Juneau (RP=8%), and Gustavus/Elfin Cove (RP=8%), while the goal was not achieved at Sitka (RP=20%). The estimated average net weights of halibut harvested by charter anglers at Craig/Klawock (RP=4%), Petersburg/Wrangell (RP=4%), and Gustavus/Elfin Cove (RP=2%) met the precision goal, while the estimated net weights in Ketchikan (RP=7%), Sitka (RP=9%), and Juneau (RP=8%) did not. Small sample sizes of halibut harvested by charter anglers at both Ketchikan and Juneau may likely be the reason for not achieving the precision goals. Long-term trend data for mean net weights indicate that halibut sampled in Sitka have been predominantly larger than in the Juneau, Ketchikan, and Craig fisheries during the 1990s. Petersburg/Wrangell average net weights are presented for the 2003 and 2004 seasons, for comparisons with the other ports in the last 2 years (Figure 14). The port with the highest mean net weight is Gustavus/Elfin Cove.

On a regionwide basis, the unweighted average net weight of halibut sampled from charter anglers in 2004 was 6.1 lb greater than the halibut sampled from non-chartered anglers at 24.4 lb and 18.3 lb, respectively (Table 6). The average net weight of halibut harvested by non-chartered anglers increased or remained the same at all ports except Petersburg/Wrangell, where the mean net weight went from 20.3 lb in 2003 to 18.1 lb in 2004. The average net weight of halibut harvested by charter anglers increased at the ports of Ketchikan, Craig/Klawock, and Sitka, and declined at the ports of Petersburg/Wrangell, Juneau, and Gustavus (Table 6 and Figure 14).

Length frequency distributions of the halibut harvested during 2004 varied between fisheries, with combined charter and non-charter length frequency distributions of halibut greater than 135 cm varying from a high of 26% of the halibut sampled in Gustavus/Elfin Cove to a low of 2% in Craig/Klawock (Table 7 and Figure 15). The majority of halibut (79%) sampled in Gustavus/Elfin Cove were in the 85-135 cm length range, while the predominant length ranges for the other areas in descending order were: Petersburg/Wrangell 75-115 cm at 78%, Ketchikan 65-105 cm at 79%, Juneau 65-105 cm at 77%, Sitka 65-95 cm at 68%, and Craig/Klawock 65-95 cm at 80%.

For the second year in a row, the largest halibut harvested by non-charter anglers were from the Gustavus/Elfin Cove area with 77% falling in the 75-125 cm range. Petersburg/Wrangell non-charter anglers followed, with 86% of the halibut in the 65-115 cm range. Most of the halibut harvested by non-charter anglers in Ketchikan, Sitka, and Juneau were in the 65-105 cm range at 82%, 80% and 76%, respectively, while in Craig/Klawock 84% were in the 65-95 cm range (Table 7).

Gustavus/Elfin Cove charter anglers harvested the largest halibut, with 80% in the 85-135 cm range. In the Petersburg/Wrangell area, 82% of the halibut harvested by charter anglers were in the 75-115 cm range. Most of the halibut harvested by charter anglers in Juneau (80%) and Ketchikan (79%) were in the 65-115 cm range, while in Sitka 67% of the charter halibut harvest was in the 65-95 cm range. Craig area charter anglers harvested the smallest halibut, with 77% falling in the 65-95 cm range (Table 7).

Examination of the 2004 onsite interview data for disposition of halibut brought back to the docks/boat launches indicated that on a regional basis 54% of the halibut harvested by sport anglers were brought back whole (Table 8). Non-charter anglers brought back 69% of their halibut whole/intact, down from 72% last year. Charter anglers brought back 48% of their halibut whole, similar to the 49% last year. Again, Sitka continued to have the highest charter class Cleaned-at-Sea (CAS) percentage at 89%, while Craig/Klawock and the Petersburg/Wrangell area had the lowest at 1% and 8%, respectively. This trend was also true for non-chartered anglers, with Sitka having the highest (CAS) percentage at 79%, and Craig/Klawock and Petersburg/Wrangell the lowest at 9% and 10%, respectively.

DISCUSSION

It is evident that sport fishing for halibut will continue to be an important activity for sport anglers and that continued demand will produce a relatively consistent annual harvest given no major change in stock status. The 2004 projected IPHC Area 2C regional halibut harvest is 117,496 fish, based on preliminary creel survey data from Sitka, Juneau, and Ketchikan. This is 2% lower than last year's harvest of 119,481 halibut. Halibut samples taken across the region resulted in an unweighted average net weight lower than last year (22.6 lb compared to 24.0 lb during 2003). This year's unweighted average net weight was based 8,350 halibut measurements, and is the highest number of halibut ever measured during the creel survey. This increase is largely the result of a longer sampling season in Petersburg/Wrangell, an abundant supply of whole halibut to measure in Gustavus and Elfin Cove. Overall, fishing activity for both halibut and salmon by charter vessels increased during 2004, with the number of surveyed trips ($n=3,998$) being the highest on record, and is also a result of the increased sampling at Gustavus/Elfin Cove and Petersburg/Wrangell. According to the most recent effort data available from the SWHS (2003), the number of combined resident and non-resident sport-fishing trips has decreased 14% since 2000. During this period, days fished by resident anglers decreased by 21%, while the number of trips taken by non-resident anglers decreased 1% (Jennings et al. *In prep b*). Many non-resident anglers will more than likely take a charter sport fishing trip (either for salmon, halibut, or both) while visiting the area. There is little reason to expect that non-resident angling pressure will drop off significantly any time soon, as projections for numbers of visitors to the region continue to increase annually.

The growth in the size of the charter vessel fleet in Southeast Alaska appears to have stabilized. The number of registered charter boats peaked in 2001 at 1,302 vessels. This year, 1,265 charter vessels registered, up slightly (0.7%) from 1,256 vessels last year. As the number of charter trips continues to rise, halibut will continue to be harvested in large numbers. The charter fleet will no doubt continue to target halibut throughout much of the salmon fishing season (usually June through August). When salmon are abundant, more effort will be redirected toward halibut after a daily limit of salmon has been taken. The outer coast ports of Elfin Cove and Sitka had the highest proportion of combination trips for the region at 72% and 55%, respectively, followed by Gustavus at 49%, Craig/Klawock at 41%, and Wrangell at 32%. Where halibut were less abundant (traditionally the inside ports), the percentage of combination trips was much lower with Petersburg at 16% and Ketchikan at 8%, and Juneau at 7%. Shifts in fishing effort are also more likely to occur with non-resident chartered anglers who are limited to lower daily bag limits and annual harvests of Chinook salmon (*Oncorhynchus tshawytscha*) in Southeast Alaska. After an annual limit is attained, and when other salmon species are not available, the remainder of their charter fishing time will likely be spent pursuing halibut and other bottomfish such as lingcod (*Ophiodon elongatus*) and rockfish (*Sebastes*).

While regionwide, the estimated halibut harvest increased this year, localized depletion of Pacific halibut stocks is of concern in areas where: a) fishing effort is high, b) local productive fishing areas for halibut are somewhat limited, and c) little productive area is left for effort to redistribute itself once resources in primary areas have been exhausted. Analysis of data to monitor possible localized depletion has focused on the Juneau area since the number of halibut harvested and the amount of targeted bottomfish effort reached record low levels during 2001 and 2002, suggesting that anglers were exiting the fishery. The increase in both bottomfish effort and halibut harvest during 2003 and 2004 in the Juneau area may indicate a turn-around in the local

fishery. The HPUEs for both charter and non-chartered anglers fishing in the Juneau area were the highest on record for the period 1988 to 2004. Non-chartered anglers fishing in the combined outside areas has leveled off for the last 3 years (2002-2004), while the HPUE for non-chartered anglers fishing the combined inside Juneau areas has been steadily increasing since 2000.

This year, creel survey results indicated that halibut abundance and angler effort in the Juneau area is on the rise. According to preliminary creel survey estimates, this year's halibut harvest of 11,190 fish in the Juneau area was the highest since 1997, when 12,574 halibut were harvested and is 59% above the recent five-year average. Based on the creel survey, the estimated bottomfishing effort in the Juneau area of 60,707 hrs was up only 1% from last year, and is 8% above the recent five-year average. Compared to last year, the HPUE for all of the Juneau inside sub-areas increased except for inside south sub-area. Juneau's outside area HPUE increased in the west sub-area, remained stable in the central and north sub-areas, and decreased in the south sub-area. The HPUE for halibut in the Juneau area has improved in recent years, rebounding from record low numbers in the 1999-2001 period.

Due to the consistently low HPUE for halibut in the Juneau sport fishery during the past several years, it is encouraging to see renewed effort and an increased harvest this year. Since Juneau anglers routinely travel to remote fishing areas far more frequently than they did in the late 1980's, there seems to be little doubt that localized depletion of stocks within Juneau's inside sub-areas may have occurred. According to the Statewide Harvest Survey, the Juneau area halibut harvest has remained fairly constant, averaging 15,321 fish (ranging from 14,213 to 16,672 fish) during the period from 1998 to 2002, and then increased significantly with the 20,530 halibut harvested in 2003. The fairly stable halibut harvest during 1998 to 2002 for the Juneau area estimated from the SWHS is probably due to growth in remote charter fisheries in more productive grounds, masking the decline in the local fishery. Depletion of halibut stocks in the Juneau inside sub-areas could be exacerbated by changes in fishing patterns for sport, commercial, and subsistence fisheries.

Because of the growing importance of precise average weight estimates for use in GHL's and proposed IFQ programs, there was concern regarding whether length data collected in IPHC Area 2C were from a representative sample of halibut harvested. In 1999, a pilot study in Sitka showed only 20% of the halibut harvested by charter anglers were being brought whole/intact back to the docks, while the remainder was CAS. ADF&G initiated similar data collection for all of IPHC Area 2C to quantify the percentage of the catch CAS. Analysis showed:

- 1) Sitka has exhibited a consistently high percentage of halibut CAS, i.e. 88% during 2000, 86% in 2001, 85% in 2002, 85% in 2003, and 88% in 2004.
- 2) During 2004, other ports in the region had a significantly lower percentage of halibut being CAS, ranging from a low of 4% in Craig/Klawock, 9% in Petersburg/Wrangell, 20% in Ketchikan, 25% in Gustavus/Elfin Cove, and 45% in Juneau.
- 3) With the exception of Sitka, all the ports exhibited adequate sampling of halibut brought back to the docks whole/intact and thus available for measuring.

The results of the examination of disposition of halibut being brought back to the docks indicate that overall, halibut measurements being collected for estimating average length and weight by port should be representative, although in Sitka, the high rates of halibut CAS makes it difficult to obtain good samples.

In 2000, the boundary in the Statewide Harvest Survey between area G (Glacier Bay) and area D (Sitka) was modified (Figure 2). As a result, the size of area D decreased and area G increased. Even though the size of area D decreased, the harvest levels of halibut in area D remained about the same during the first year after re-districting. However, during 2001, the harvest in area D increased to a record high of 33,104 halibut, decreased to 25,156 halibut in 2002, and then increased to 32,362 halibut in 2003. The annual halibut harvest in area G (Glacier Bay) since the modification of the boundary jumped from below 9,300 fish prior to 2000 to between 13,600 and 19,800 fish during 2000 to 2003. (Jennings et al. *In prep a-b*).

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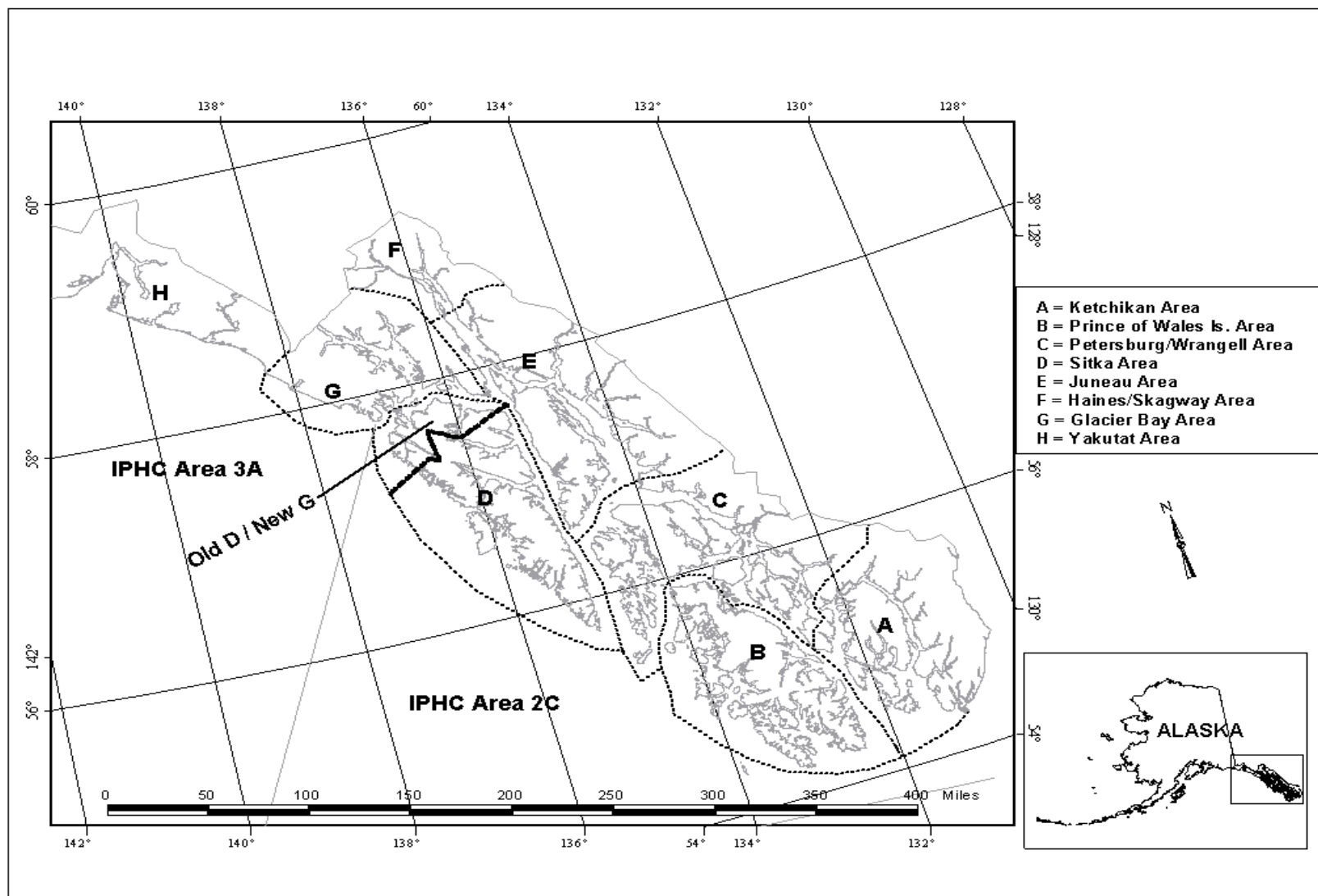


Figure 1.-Map of Southeast Alaska showing boundaries of the International Pacific Halibut Commission (IPHC) regulatory areas, and the Statewide Harvest Mail Survey areas. Note the area labeled “Old D/New G” which prior to 2000 was part of SWHS area D but now is part of area G.

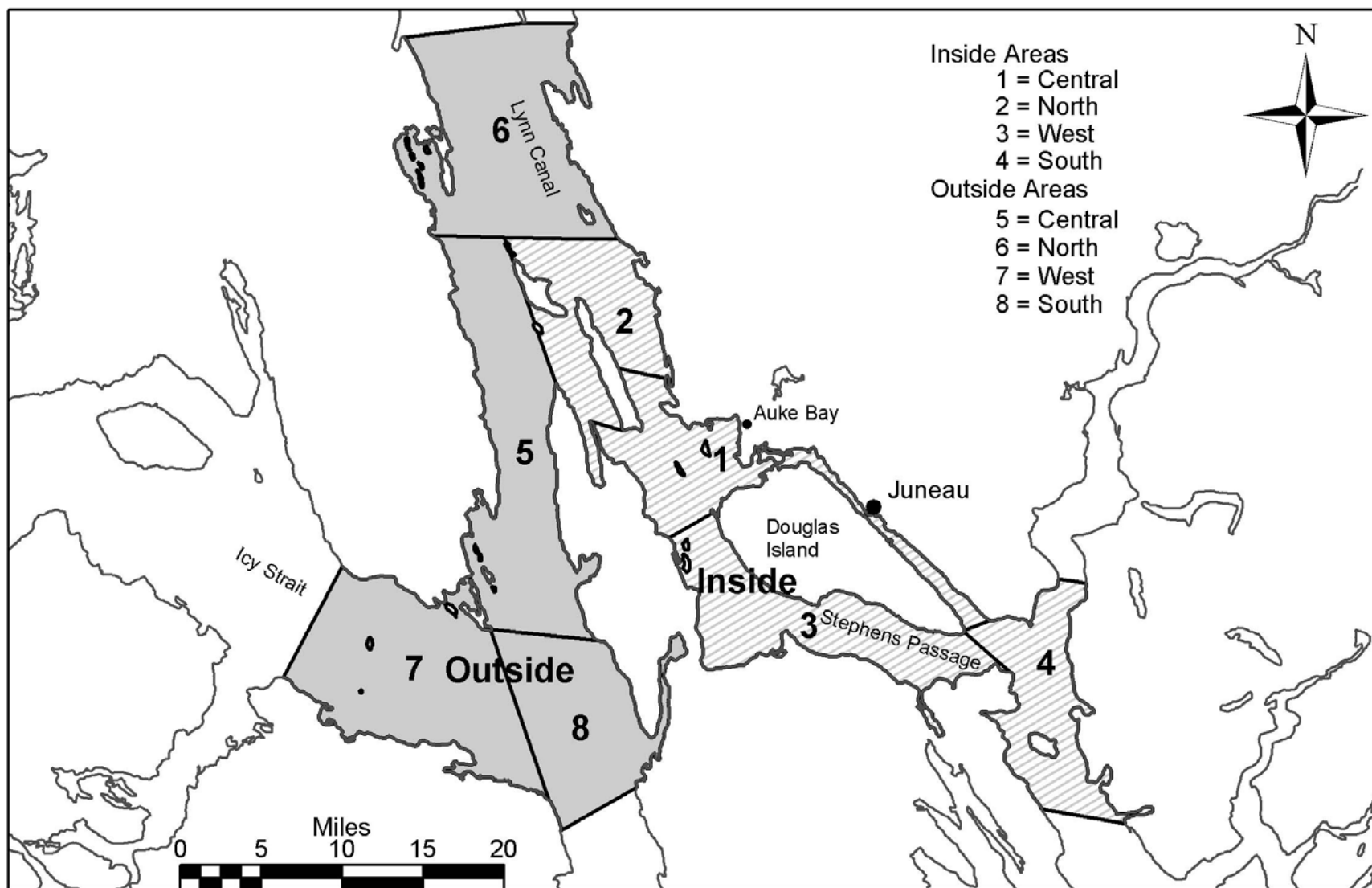


Figure 2.-Map showing boundaries for the inside and outside areas (including sub-areas) used to aggregate Juneau on-site creel survey data from non-chartered trips from 1988 to 2004 to evaluate trends in HPUE which may be an indicator of local depletion.

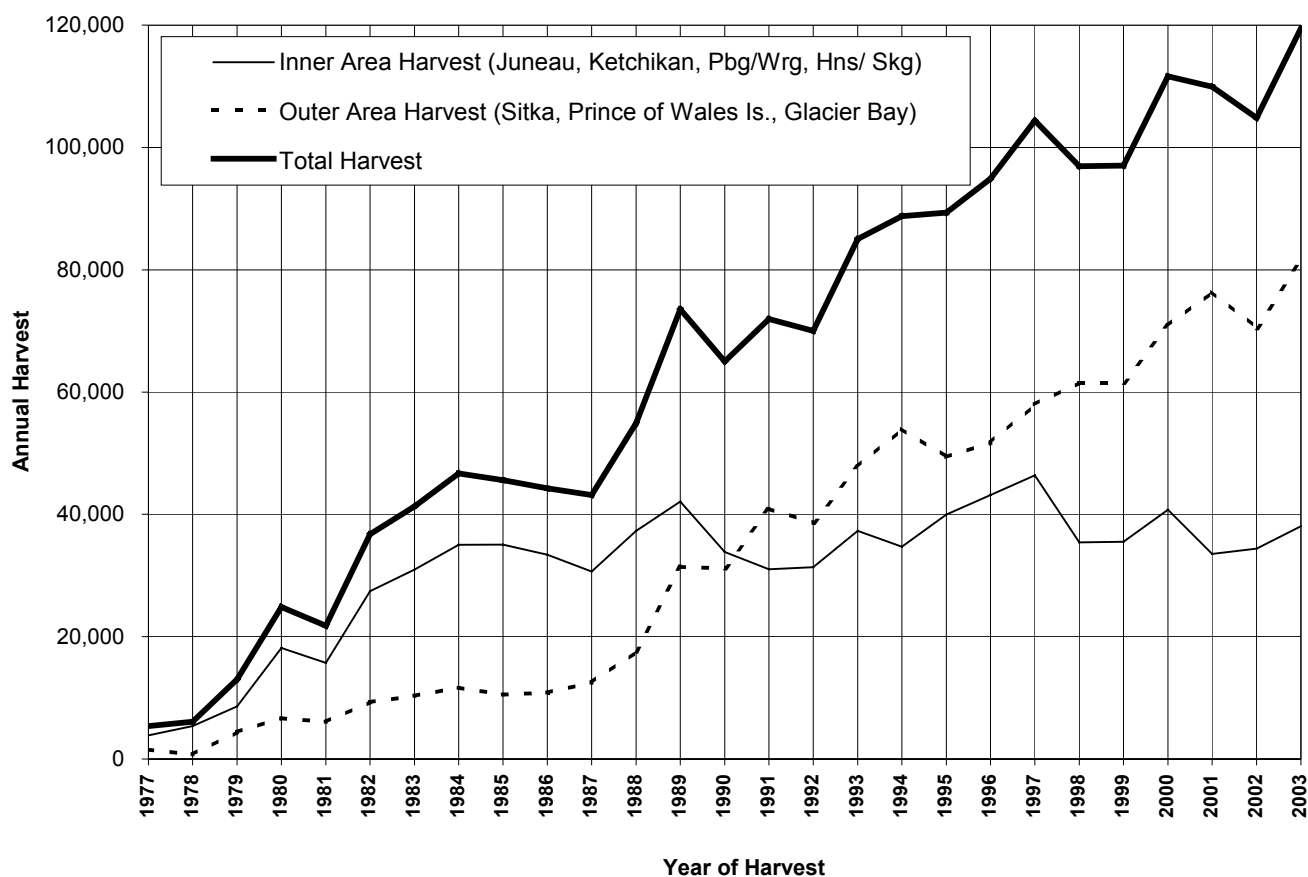


Figure 3.-Sport harvest totals of Pacific halibut in IPHC Area 2C by inner and outer coastal areas from 1977 to 2003 as estimated by the Statewide Harvest Mail Survey (Howe et al. 2002 a-d, Walker et al. 2003, Jennings et al. 2004, Jennings et al. *In prep a-b*). Note that SWHS estimates for 1996-1998 were revised by ADF&G in September 2000.

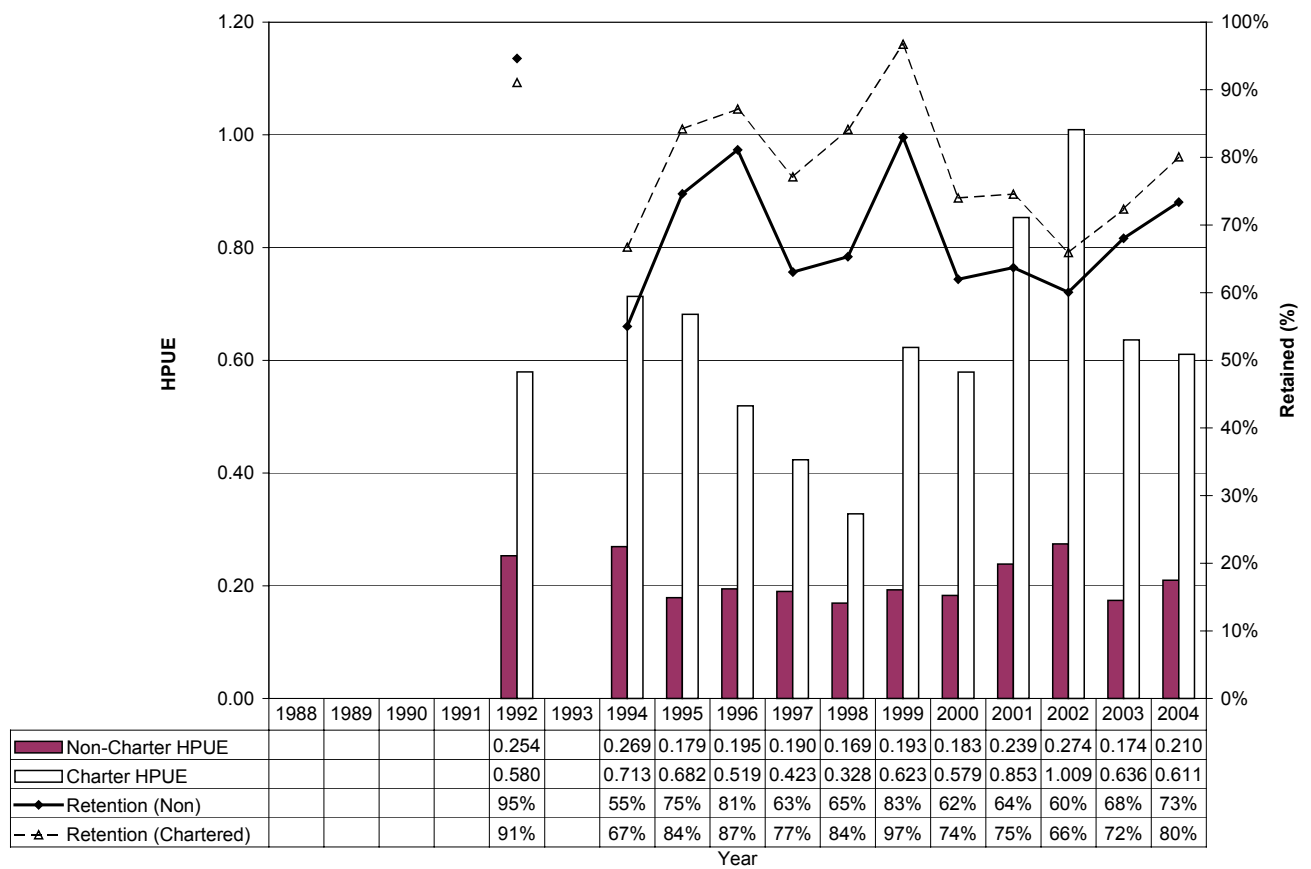


Figure 4.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Craig, Alaska from 1988 to 2004. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

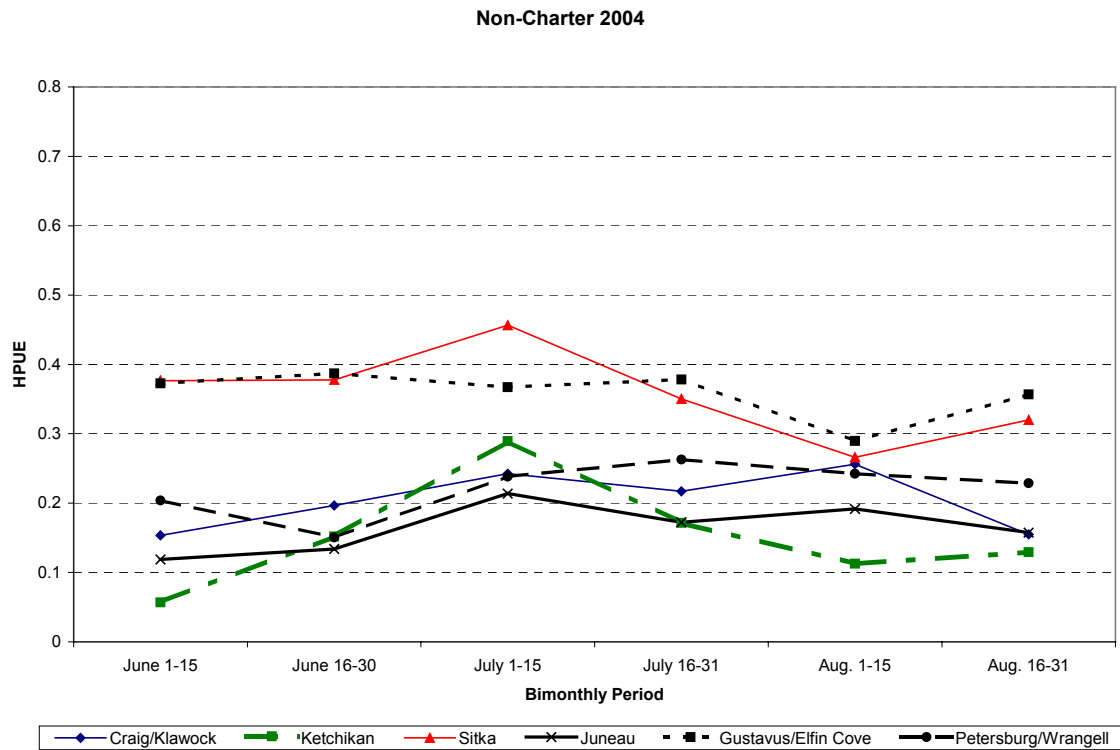
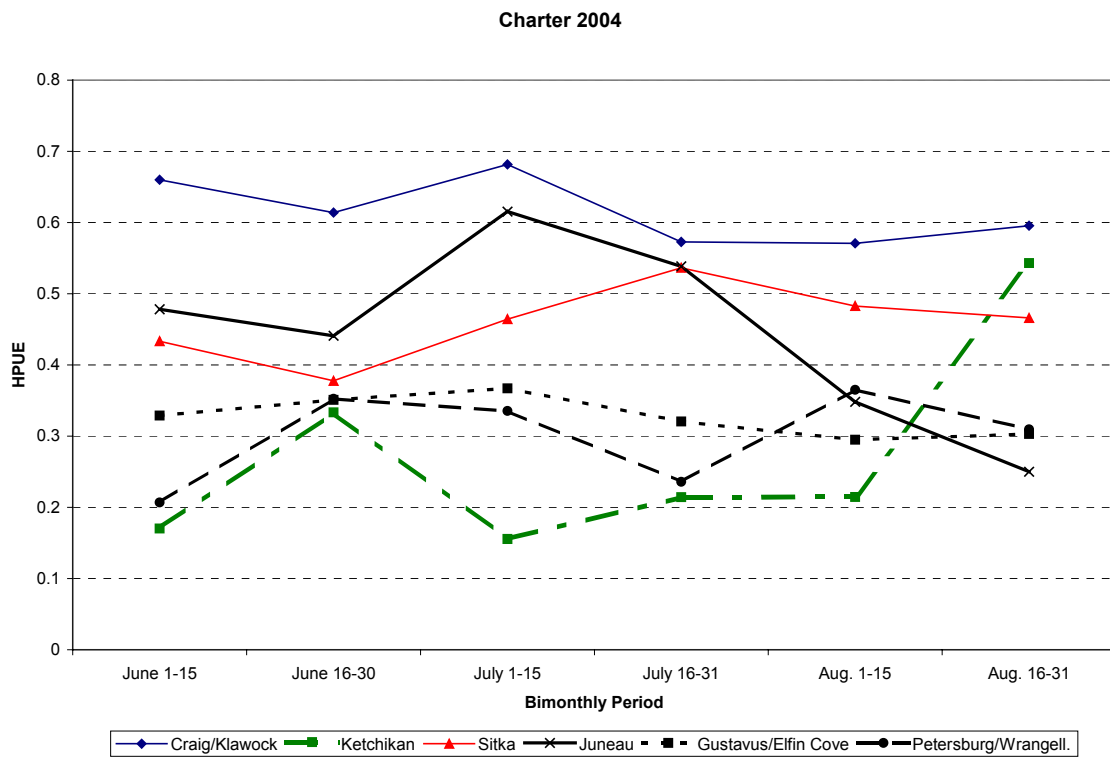


Figure 5.-Semi-monthly charter and non-chartered halibut harvest per angler-hour of bottomfishing effort (HPUE) in sampled ports of IPHC Area 2C during 2004.

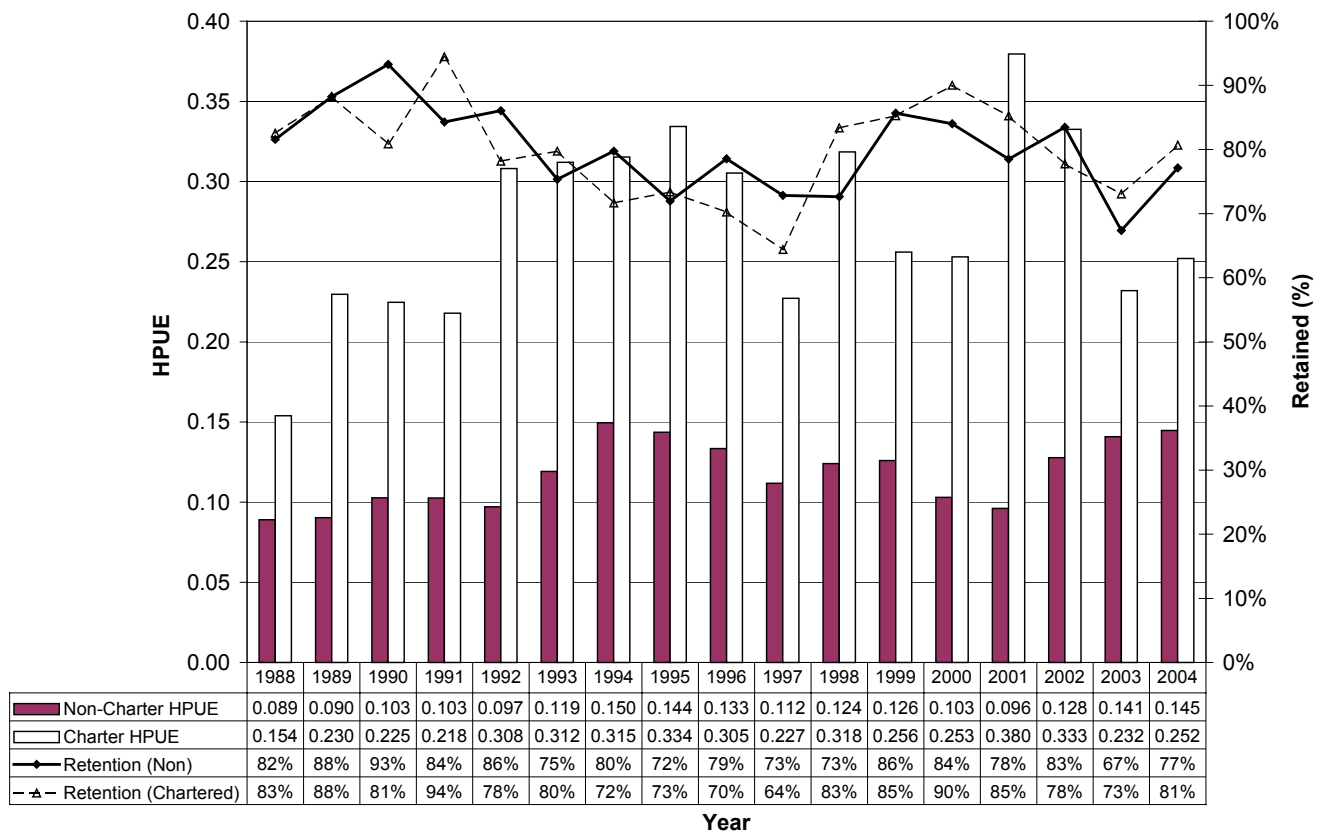


Figure 6.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Ketchikan, Alaska from 1988 to 2004. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

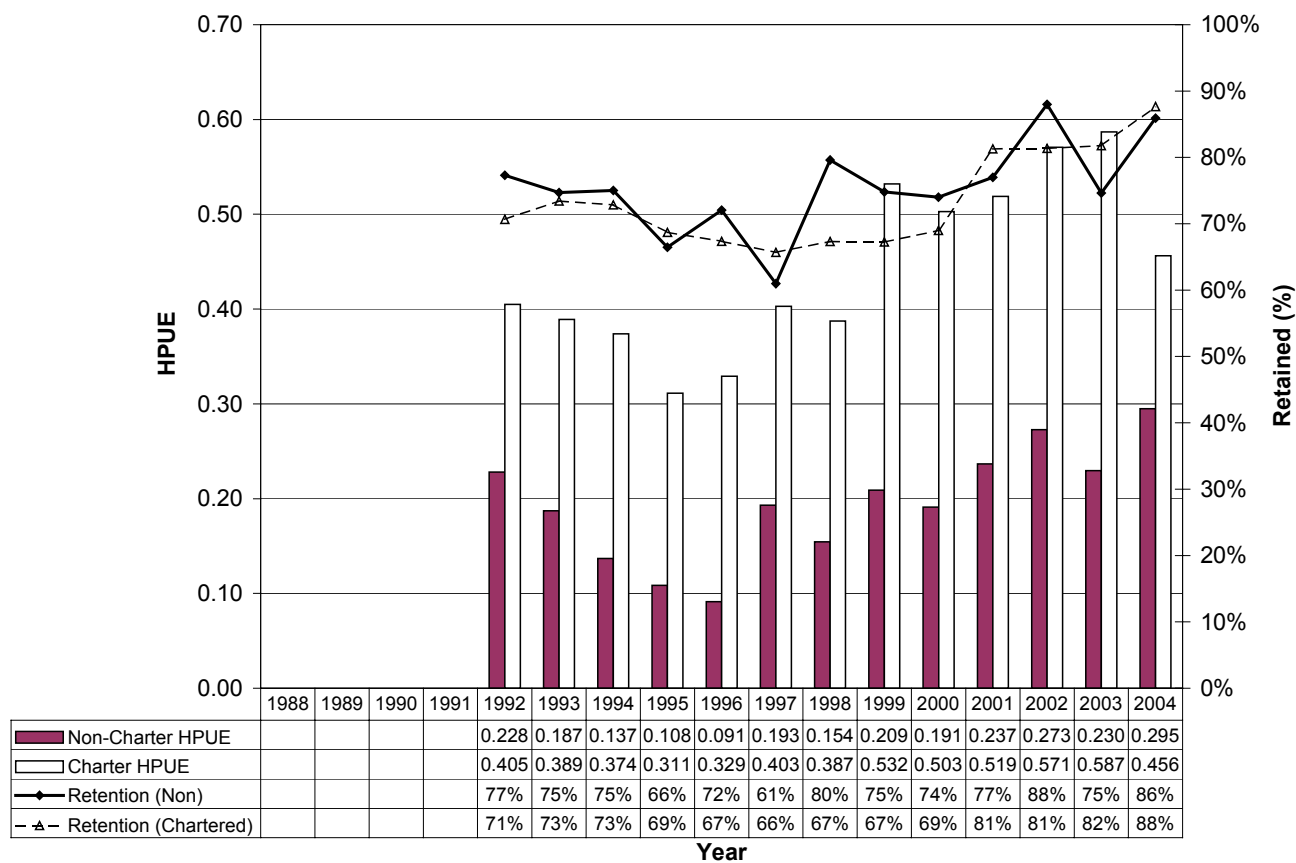


Figure 7.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Sitka, Alaska from 1988 to 2004. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

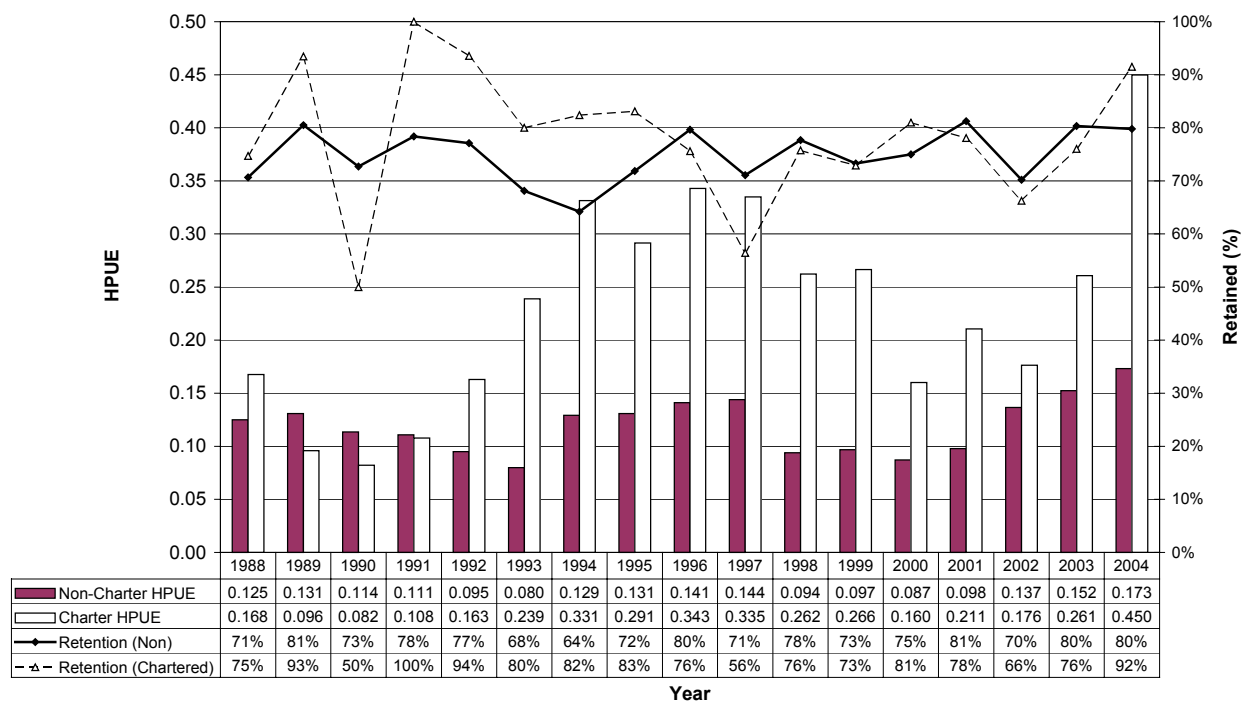


Figure 8.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Juneau, Alaska from 1988 to 2004. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

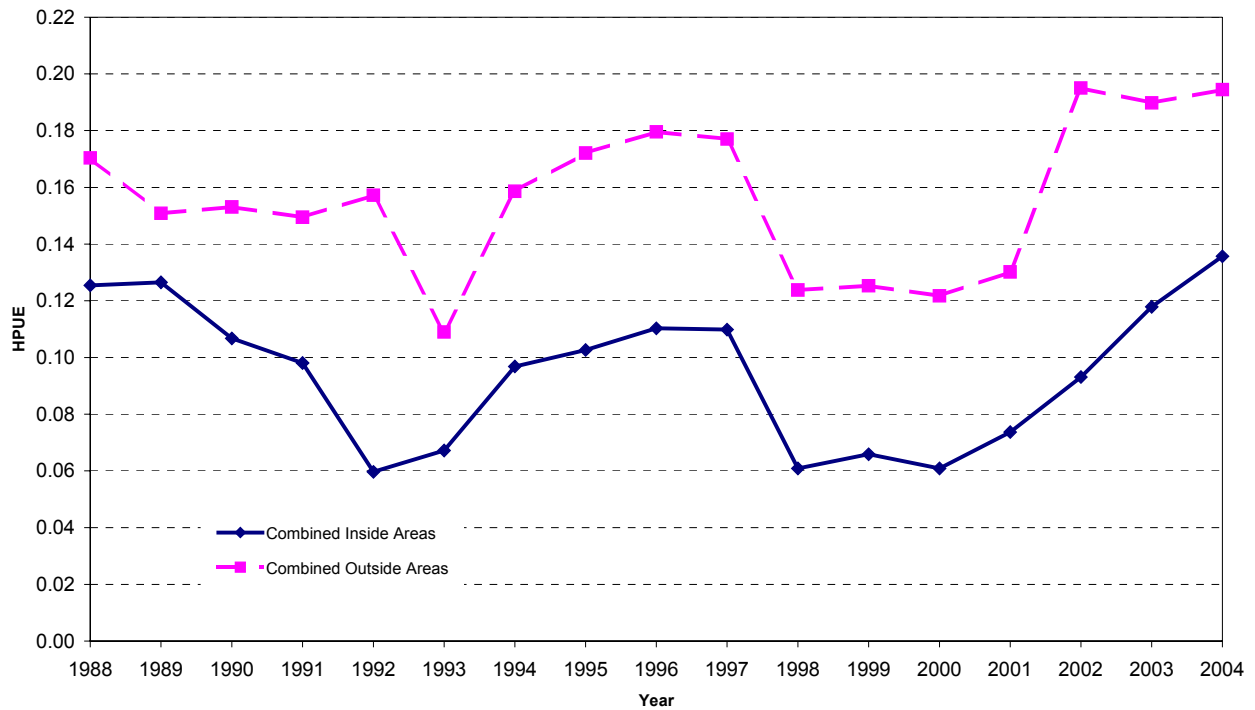


Figure 9.-Historical halibut harvest per unit of effort (HPUE) for non-chartered halibut trips to inside and outside areas around Juneau, Alaska during the period from June to August from 1988 to 2004. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

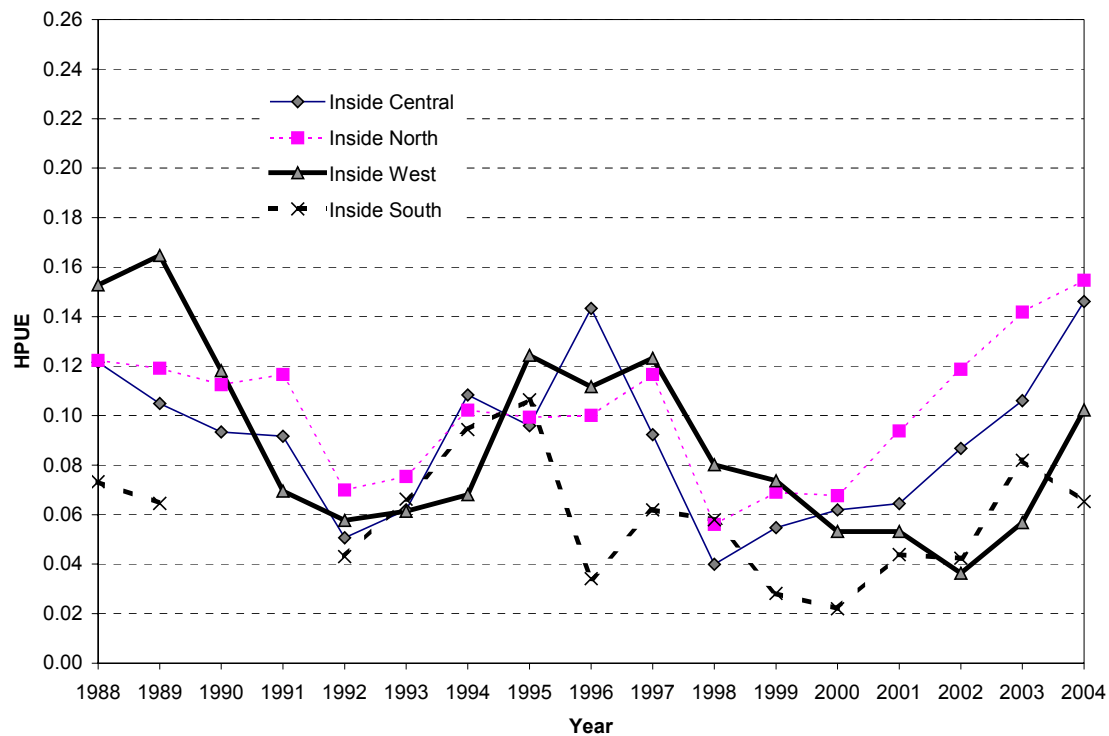


Figure 10.- Historical trend of non-chartered halibut harvest per angler-hour of bottomfishing effort (HPUE) during the period from June to August in Juneau's inside sub-areas from 1988 to 2004.

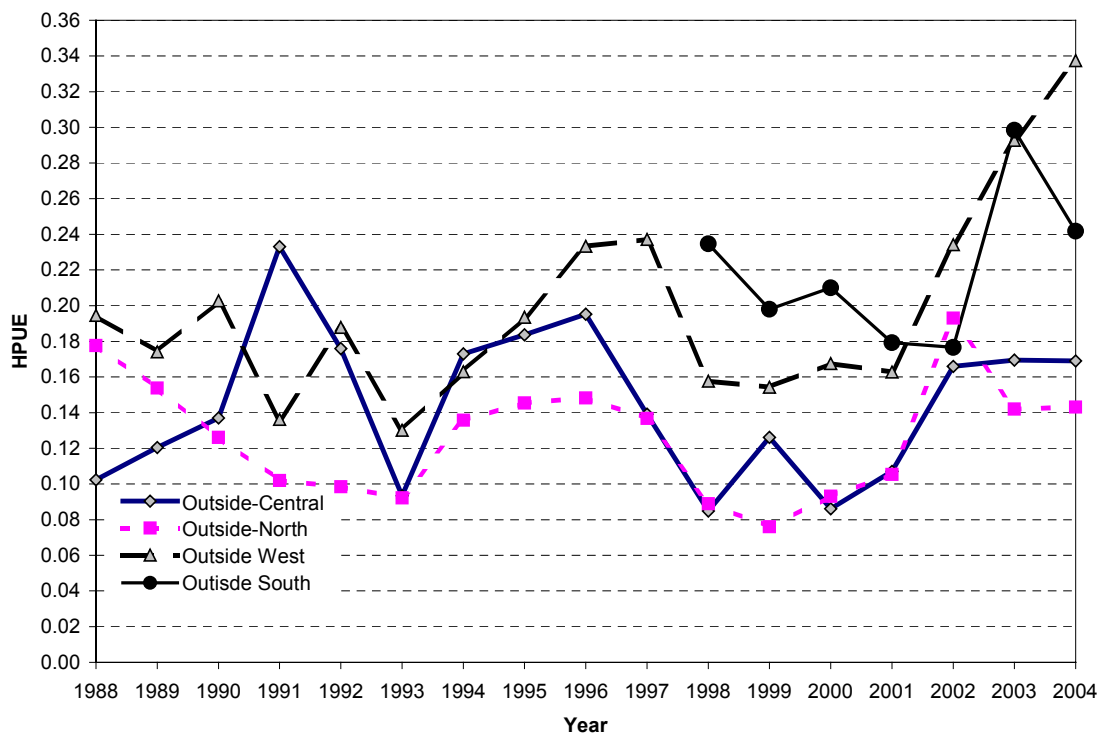


Figure 11.-Historical trend of non-chartered halibut harvests per angler-hour of bottomfishing effort (HPUE) during the period from June to August in Juneau's outside sub-areas from 1988 to 2004.

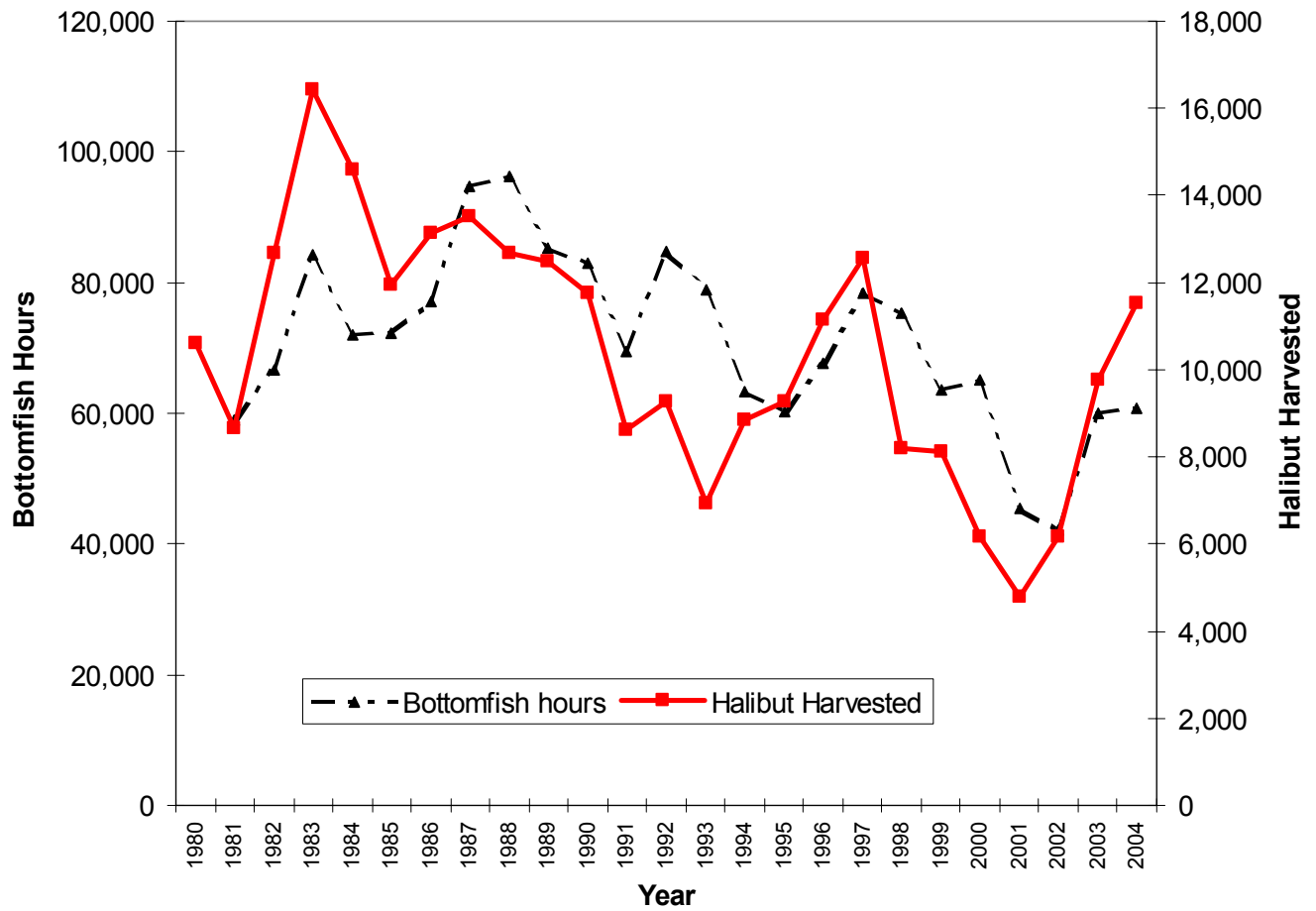


Figure 12. Number of angler hours of bottomfishing effort and total halibut harvested from creel survey data from 1980 to 2004 in the Juneau Marine Sport Fishery.

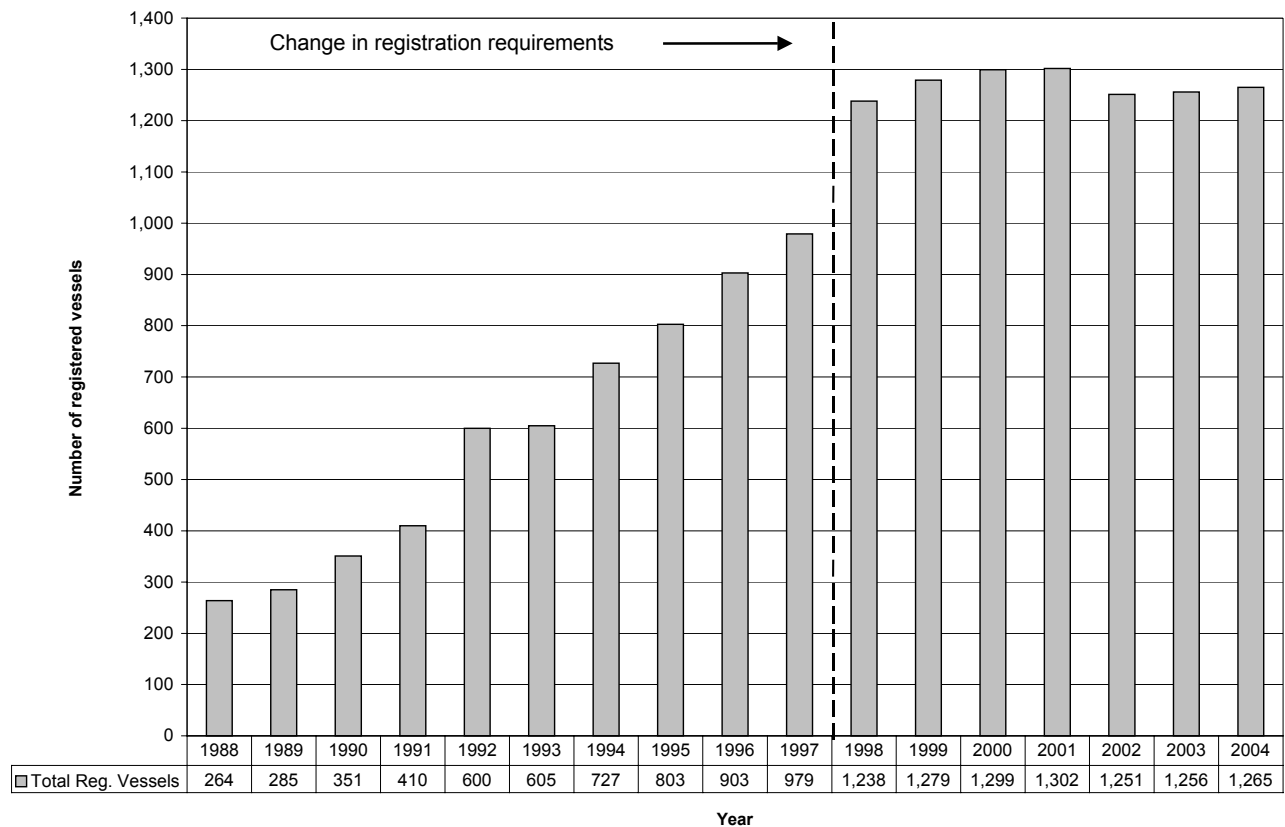


Figure 13. Number of charter vessels registering with the Alaska Department of Fish and Game from 1988 to 1997, and the Commercial Fishery Entry Commission from 1998 to 2004 for use in Southeast Alaska waters (including Yakutat).

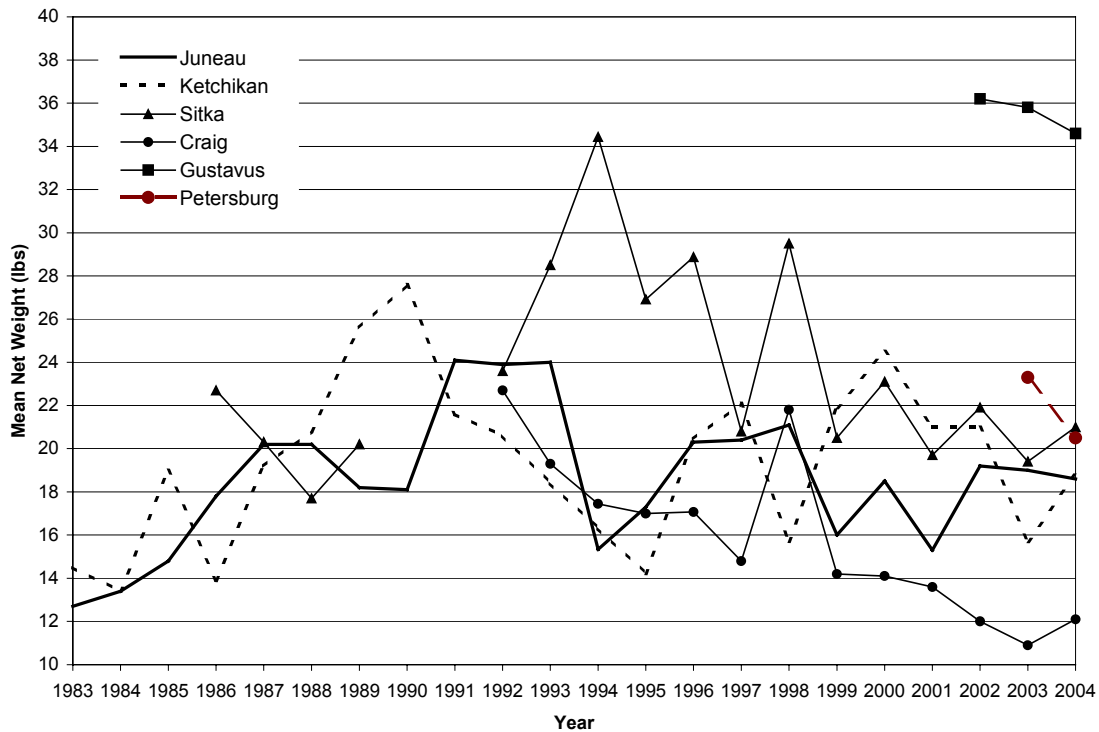


Figure 14.-Historical trend of mean net weights (headed and eviscerated) of sport caught halibut in sampled IPHC Area 2C ports from 1983 to 2004.

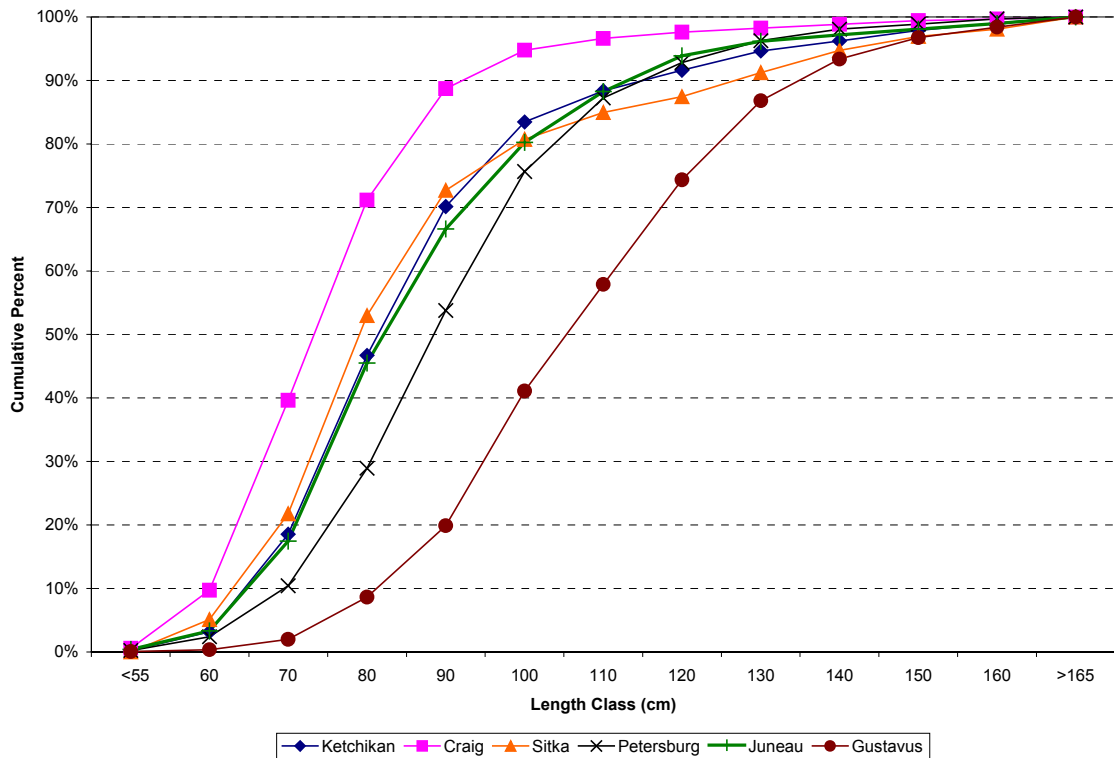


Figure 15.-Cumulative length-frequencies of sport caught halibut sampled in IPHC Area 2C ports during 2004.

Table 1.-Historical sport harvests of Pacific halibut in IPHC Area 2C (which excludes Yakutat) of Southeast Alaska from 1977 to 2003 as reported in the Statewide Harvest Mail Survey (modified from: Howe et al. 2002 a-d, Walker et al. 2003, Jennings et al. 2004, Jennings et al. *In prep a-b*).

Year	Area of Harvest							Total
	Ketchikan	Prince of Wales Island	Petersburg/ Wrangell	Sitka	Juneau	Haines/ Skagway	Glacier Bay	
1977	1,360	277	447	992	1,976	81	271	5,404
1978	751	230	1,103	339	3,066	448	170	6,107
1979	1,359	593	1,380	3,179	5,832	49	632	13,024
1980	5,260	1,085	3,193	4,976	9,333	361	620	24,828
1981	4,634	1,321	2,299	4,288	8,122	670	443	21,777
1982	5,963	2,242	3,845	6,330	16,988	650	744	36,762
1983	6,760	1,849	4,147	7,945	18,651	1,426	535	41,313
1984	11,719	2,724	5,649	8,197	15,618	2,029	748	46,684
1985	12,600	3,073	4,757	6,091	16,695	1,023	1,355	45,594
1986	11,014	2,902	3,624	6,617	16,574	2,189	1,331	44,251
1987	9,676	2,760	3,039	7,545	14,382	3,567	2,184	43,153
1988	11,544	2,778	3,877	10,572	18,697	3,201	4,238	54,907
1989	13,699	9,213	5,548	17,727	20,273	2,588	4,484	73,532
1990	9,872	10,264	5,768	17,492	16,248	1,972	3,415	65,031
1991	9,733	11,875	6,433	20,283	13,637	1,199	8,766	71,926
1992	9,455	11,661	6,153	22,092	14,850	926	4,863	70,000
1993	12,763	22,501	5,984	19,366	16,340	2,195	5,878	85,027
1994	15,313	24,465	7,992	23,701	10,362	1,058	5,849	88,740
1995	14,483	20,808	9,488	21,452	15,145	856	7,090	89,322
1996 ^a	15,316	23,266	10,234	20,840	16,414	1,209	7,618	94,897
1997 ^a	13,685	21,201	10,417	27,552	21,282	1,007	9,242	104,386
1998 ^a	11,311	24,028	8,995	30,303	14,553	564	7,190	96,944
1999	10,989	25,739	8,133	28,222	15,522	879	7,552	97,036
2000 ^b	13,665	28,860	9,930	28,375	16,672	499	13,639	111,640
2001	10,106	28,210	8,345	33,104	14,213	864	15,112	109,954
2002	10,766	30,960	6,742	25,156	15,647	1,220	14,322	104,813
2003	8,810	29,307	7,569	32,362	20,530	1,136	19,767	119,481
1977-2003 Ave.	9,726	12,748	5,744	16,115	14,356	1,254	5,484	65,427
% 1977-2002 ave.	15%	19%	9%	25%	22%	2%	8%	100%
1999-2003 Ave.	10,867	28,615	8,144	29,444	16,517	920	14,078	108,585
% 1998-2002 ave.	10%	26%	7%	27%	15%	1%	13%	100%

^a-SWHS estimates for 1996-1998 were revised by ADF&G/Div. of Sport Fish/RTS in September 2000.

^b-Glacier Bay boundary area enlarged to include all of Icy Strait and Cross Sound in 2000.

Table 2.-Total number of registered and active charter vessels by sampled ports as determined from on-

Port and Year	Survey Period	Registered ^a	Minimum No. Active	% Active	Fished for Halibut	% Fished for Halibut
Ketchikan						
1998	4/27-9/27	188	98	53%	31	32%
1999	4/26-9/26	204	89	43%	38	43%
2000	4/24-9/24	199	96	50%	47	49%
2001	5/07-9/23	224	79	36%	21	27%
2002	4/29-9/29	220	86	39%	31	36%
2003	4/28-9/28	227	95	42%	43	45%
2004	4/26-9/26	216	97	45%	41	42%
Craig/Klawock						
1998	4/27-9/13	101	13	13%	10	77%
1999	4/26-9/12	106	32 ^b	30%	28	88%
2000	4/24-9/24	115	34 ^b	30%	31	91%
2001	5/07-9/09	114	29 ^b	25%	27	93%
2002	5/06-9/15	105	28 ^b	27%	25	89%
2003	5/05-9/14	106	24 ^b	23%	20	83%
2004	5/03-9/12	115	43 ^b	37%	28	65%
Sitka						
1998	4/27-9/27	240	119	49%	95	80%
1999	4/26-9/26	255	117	46%	99	85%
2000	4/24-9/24	269	142	53%	107	75%
2001	4/23-9/23	270	121	45%	97	80%
2002	4/29-9/29	279	136	49%	118	87%
2003	4/28-9/28	277	128	46%	109	85%
2004	4/26-9/26	288	127	44%	104	82%
Petersburg						
1998	5/04-7/13	62	15	24%	14	93%
1999	5/03-7/11	62	17	27%	15	88%
2000 ^c	5/01-9/10	64	18	29%	17	94%
2001	5/09-7/08	64	13	21%	11	85%
2002	5/06-7/07	59	12	20%	11	92%
2003 ^d	5/07-9/14	52	13	25%	13	100%
2004 ^e	5/03-9/12	55	14	25%	13	93%
Wrangell						
1998	4/27-6/15	57	11	19%	8	73%
1999	5/03-7/11	54	6	11%	4	67%
2000 ^c	4/24-9/10	51	15	29%	15	100%
2001	4/30-7/01	48	11	23%	3	27%
2002	5/06-7/07	49	7	14%	3	43%
2003 ^d	5/02-9/14	45	7	16%	5	71%
2004 ^e	5/10-9/12	36	4	11%	2	50%
Juneau						
1998	4/27-9/27	207	73	35%	44	60%
1999	4/26-9/26	191	66	35%	35	53%
2000	4/24-9/24	199	58	29%	23	40%
2001	4/23-9/23	181	41	23%	14	34%
2002	4/29-9/29	160	41	26%	20	49%
2003	4/28-9/28	154	35	23%	16	46%
2004	4/26-9/26	153	33	22%	16	48%
Gustavus						
2002	6/03-9/15	29	24	83%	23	96%
2003	5/05-9/14	29	22	76%	22	100%
2004	5/10-9/12	32	22	69%	21	95%
Elfin Cove						
2003	6/01-9/06	38	27	71%	26	96%
2004	5/10-9/12	39	24	62%	24	100%
Totals						
1998		852	329	39%	202	61%
1999		870	314	36%	207	66%
2000		890	363	41%	240	66%
2001		895	294	33%	173	59%
2002		901	334	37%	231	69%
2003		928	351	38%	254	72%
2004		934	364	39%	249	68%

^a Noted increases in 1998-2001 registrations reflect changes in agency requirements and the resulting source database.

^b Estimates for 1999 - 2004 include vessel activity in both Klawock and Craig.

^c Sampling extended in Petersburg and Wrangell through 10 September.

^d Sampling extended in Petersburg and Wrangell through 14 September.

^e Sampling extended in Petersburg and Wrangell through 12 September.

site sampling in IPHC Area 2C from 1998 to 2004.

Table 3.-Number of surveyed trips (including salmon fishing trips) per charter vessel by port from on-site

Port and Year	Survey Period	Active Vessels ^a	No. of Surveyed Trips per Vessel				
			1	2-4	>4	Average	
Ketchikan	1998	4/27-9/27	98	35	24	39	4.7
	1999	4/26-9/26	89	22	18	49	6.0
	2000	4/24-9/24	96	21	22	53	6.1
	2001	5/07-9/23	79	15	17	48	5.9
	2002	4/29-9/29	86	14	18	55	7.8
	2003	4/28-9/28	95	18	18	59	6.9
	2004	4/26-9/26	97	20	30	47	5.7
Craig/Klawock	1998	4/27-9/13	13	6	3	4	6.6
	1999	4/26-9/12	31 ^b	9	8	14	7.4
	2000	4/24-9/10	34 ^b	10	6	18	8.6
	2001	5/07-9/09	29 ^b	10	7	13	7.8
	2002	5/06-9/15	28 ^b	6	7	16	8.6
	2003	5/05-9/14	24 ^b	3	8	13	8.0
	2004	5/03-9/12	43 ^b	17	10	16	6.0
Sitka	1998	4/27-9/27	119	27	22	70	7.5
	1999	4/26-9/26	117	25	15	77	9.3
	2000	4/24-9/24	142	43	14	85	8.3
	2001	4/23-9/23	121	16	15	91	10.1
	2002	4/29-9/29	136	22	24	90	8.9
	2003	4/28-9/28	128	18	19	91	10.1
	2004	4/26-9/26	127	14	27	86	12.0
Petersburg	1998	5/04-7/13	15	2	4	9	9.0
	1999	5/03-7/11	17	5	4	8	6.1
	2000 ^c	5/01-9/10	18	7	3	8	9.7
	2001	5/09-7/08	13	4	4	5	6.3
	2002	5/06-7/07	12	4	2	6	6.2
	2003 ^d	5/07-9/14	13	2	2	9	13.5
	2004 ^e	5/03-9/12	14	2	3	9	13.9
Wrangell	1998	4/27-6/15	11	7	4	0	1.8
	1999	5/03-7/11	6	3	3	0	1.9
	2000 ^c	4/24-9/10	15	6	6	3	3.2
	2001	4/30-7/01	11	4	8	0	2.1
	2002	5/06-7/07	7	6	1	0	1.1
	2003 ^d	5/02-9/14	7	3	3	1	2.9
	2004 ^e	5/10-9/12	4	2	0	2	5.5
Juneau	1998	4/27-9/27	73	22	21	30	4.5
	1999	4/26-9/26	66	21	17	28	5.0
	2000	4/24-9/24	58	17	17	24	5.9
	2001	4/23-9/23	41	11	10	21	5.8
	2002	4/29-9/29	41	12	10	20	5.9
	2003	4/28-9/28	35	8	12	15	5.3
	2004	4/26-9/26	33	6	7	20	7.4
Gustavus	2002	6/03-9/15	24	3	3	19	22.4
	2003	5/05-9/14	22	3	1	19	34.4
	2004	5/10-9/12	22	2	2	18	30.6
Elfin Cove	2003	6/01-9/06	27	3	6	19	7.0
	2004	5/10-9/12	24	0	0	24	21.5
Totals							
	1998		329	99	78	152	5.7
	1999		326	85	65	176	6.0
	2000		363	104	68	191	7.2
	2001		294	60	61	178	6.3
	2002		334	67	65	206	8.7
	2003		351	58	69	226	10.0
	2004		364	63	79	222	11.0

^a Number of sampled vessels with known CFEC numbers.

^b Number of active charter vessel trips surveyed for 1999-2004 includes vessel activity in Klawock and Craig.

^c Sampling extended in Petersburg and Wrangell through 10 September.

^d Sampling extended in Petersburg and Wrangell through 14 September.

^e Sampling extended in Petersburg and Wrangell through 12 September.

survey sampling in IPHC Area 2C from 1998 to 2004.

Table 4.-Number of charter vessel trips surveyed during on-site sampling in IPHC Area 2C reported to be targeting halibut only, salmon only, or both halibut and salmon from 1998 to 2004.

			Halibut Only		Both Targets		Salmon Only		
Port and Year	Survey Period	Total Trips	No.	Percent	No.	Percent	No.	Percent	
Ketchikan	1998	4/27-9/27	463	24	5%	75	16%	364	79%
	1999	4/26-9/26	535	31	6%	64	12%	440	82%
	2000	4/24-9/24	598	55	9%	75	13%	468	78%
	2001	5/07-9/23	482	17	4%	34	7%	431	89%
	2002	4/29-9/29	680 ^b	30	4%	55	8%	594	87%
	2003	4/28-9/28	659	56	9%	83	13%	520	79%
	2004	4/26-9/26	563 ^b	40	7%	46	8%	466	83%
Craig/Klawock ^a	1998	4/27-9/13	86	5	6%	45	52%	36	42%
	1999	4/26-9/12	238	12	5%	146	61%	80	34%
	2000	4/24-9/10	294	24	8%	198	67%	72	25%
	2001	5/07-9/09	230	4	2%	176	77%	50	22%
	2002	5/06-9/15	248	7	3%	173	70%	68	27%
	2003	5/05-9/14	192 ^b	4	2%	103	54%	83	43%
	2004	5/03-9/12	259 ^b	16	6%	106	41%	136	53%
Sitka	1998	4/27-9/27	890	53	6%	494	56%	343	39%
	1999	4/26-9/26	1,097	38	3%	621	57%	438	40%
	2000	4/24-9/24	1,182	118	10%	590	50%	474	40%
	2001	4/23-9/23	1,228	42	4%	606	49%	580	47%
	2002	4/29-9/29	1,211 ^b	68	6%	656	54%	480	40%
	2003	4/28-9/28	1,292 ^b	51	4%	759	59%	475	37%
	2004	4/26-9/26	1,518 ^b	89	6%	834	55%	595	39%
Petersburg	1998	5/04-7/13	135	55	41%	12	9%	68	50%
	1999	5/03-7/11	104	48	46%	11	11%	45	43%
	2000 ^c	5/01-9/10	188	124	66%	8	4%	56	30%
	2001	5/09-7/08	82	40	49%	3	3%	39	48%
	2002	5/06-7/07	74	45	61%	3	4%	26	35%
	2003 ^d	5/07-9/14	176	116	66%	14	8%	46	26%
	2004 ^e	5/03-9/12	203	134	66%	33	16%	36	18%
Wrangell	1998	4/27-6/15	20	4	20%	8	40%	8	40%
	1999	5/03-7/11	13	3	23%	2	15%	8	62%
	2000 ^c	4/24-9/10	52	28	54%	12	23%	12	23%
	2001	4/30-7/01	28	3	11%	2	7%	23	82%
	2002	5/06-7/07	8	3	38%	0	0%	5	63%
	2003 ^d	5/02-9/14	20	3	15%	11	55%	6	30%
	2004 ^e	5/10-9/12	22	7	32%	7	32%	8	36%
Juneau	1998	4/27-9/27	324	39	12%	41	13%	244	75%
	1999	4/26-9/26	328	21	6%	43	13%	264	80%
	2000	4/24-9/24	352	19	5%	17	5%	316	90%
	2001	4/23-9/23	239	12	5%	16	7%	211	88%
	2002	4/29-9/29	248	17	7%	15	6%	216	87%
	2003	4/28-9/28	184	22	12%	11	6%	151	82%
	2004	4/26-9/26	243	19	8%	18	7%	206	85%
Gustavus	2002	6/03-9/15	560 ^b	183	33%	251	45%	117	21%
	2003	5/05-9/14	792 ^b	266	34%	375	47%	149	19%
	2004	5/10-9/12	674 ^b	197	29%	333	49%	138	20%
Elfin Cove	2003	6/01-9/06	195 ^b	35	18%	141	72%	18	9%
	2004	5/10-9/12	516	84	16%	372	72%	60	12%
Totals ^f									
	1998		1,918	180	9%	675	35%	1,063	55%
	1999		2,315	153	7%	887	38%	1,275	55%
	2000		2,666	368	14%	900	34%	1,398	52%
	2001		2,289	118	5%	837	37%	1,334	58%
	2002		3,029 ^b	353	12%	1,153	38%	1,506	50%
	2003		3,510 ^b	553	16%	1,497	43%	1,448	41%
	2004		3,998 ^b	586	15%	1,749	44%	1,645	41%
	average		2,818 ^b	330	11%	1,100	38%	1,381	51%

^a Number of active charter vessel trips surveyed for 1999 - 2004 includes vessel activity in Craig and Klawock.

^b Includes some interviews where species targeted was not reported.

^c Sampling extended in Petersburg and Wrangell through 10 September.

^d Sampling extended in Petersburg and Wrangell through 14 September.

^e Sampling extended in Petersburg and Wrangell through 14 September.

^f Represents the unweighted totals of all the onsite interview data collected in area 2C each year.

Table 5.-Estimated average length (cm) of Pacific halibut sampled during on-site surveys in IPHC Area 2C by non-chartered and chartered user groups from 1998 to 2004.

Port/Year	Survey Period	Non-Chartered			Chartered			Overall		
		n	Avg. Length (cm)	SE	n	Avg. Length (cm)	SE	n	Avg. Length (cm)	SE
Ketchikan										
1998	4/27-9/27	178	88.7	1.5	105	86.4	1.0	302	88.1	1.0
1999	4/26-9/26	242	93.7	1.6	83	96.3	2.8	325	94.3	1.4
2000	4/24-9/24	337	98.7	1.4	682	98.8	0.8	1,021 ^a	98.7	0.7
2001	5/07-9/23	322	92.2	1.2	1,127	96.8	0.5	1,450	95.7	0.5
2002	4/29-9/29	411	88.8	1.4	1,428	95.1	0.6	1,840 ^b	93.7	0.5
2003	4/30-9/28	264	85.3	1.1	169	89.6	1.3	433	86.9	0.9
2004	4/26-9/26	466	87.1	1.0	489	94.2	0.9	955	90.7	0.7
Craig/Klawock										
1998	4/27-9/13	82	92.8	2.6	15	96.1	9.0	97	93.3	2.6
1999	4/26-9/12	133	90.4	2.3	451	79.9	0.8	584	82.3	0.8
2000	4/24-9/10	383	85.4	1.1	950	81.9	0.6	1,333	82.9	0.5
2001	5/07-9/09	134	84.1	1.9	293	81.2	1.0	427	82.2	1.0
2002	5/06-9/15	149	83.5	1.5	408	79.1	0.7	557	80.3	0.7
2003	5/05-9/14	385	78.9	0.7	635	78.1	0.6	1,020	78.4	0.4
2004	5/03-9/12	408	82.2	0.8	1,525	80.0	0.4	1,933	80.4	0.4
Sitka										
1998	4/27-9/27	48	92.3	3.2	345	103.5	1.6	407	101.8	1.4
1999	4/26/-9/26	101	86.3	2.4	982	94.5	0.6	1,089	93.8	0.6
2000	4/24-9/24	120	93.8	2.4	410	95.6	12.1	530	95.2	1.1
2001	4/23-9/23	90	84.6	2.4	463	92.8	1.0	554	91.4	1.0
2002	4/29-9/29	202	91.4	1.8	621	94.2	1.0	823	93.5	0.9
2003	4/28-9/28	189	83.4	1.3	1193	93.3	0.6	1,385 ^c	92.0	0.5
2004	4/26-9/26	135	87.2	1.9	550	92.6	1.1	692 ^d	91.5	1.0
Petersburg/Wrangell										
1998	5/04-7/12	66	107.8	3.3	48	123.4	4.2	114	114.4	2.7
1999	5/03-7/11	68	97.1	3.1	82	112.9	2.9	150	105.8	2.2
2000	4/24-9/10	725	92.5	0.9	718	104.4	0.8	1,443	98.4	0.6
2001	4/30-7/08	55	89.1	3.0	88	109.3	2.1	143	101.5	1.9
2002	5/06-7/07	132	96.9	2.0	196	110.8	1.9	328	105.2	1.4
2003	5/02-9/14	554	93.0	0.9	674	102.6	0.7	1,228	98.2	0.5
2004	5/03-9/12	607	90.8	0.8	814	98.6	0.6	1,421	95.3	0.5
Juneau										
1998	4/27-9/27	411	93.7	1.2	329	97.3	0.8	767	95.3	0.7
1999	4/26-9/26	292	90.1	1.6	406	83.8	0.7	705	86.5	0.8
2000	4/24-9/24	411	87.1	1.4	149	89.0	1.2	560	87.6	1.1
2001	4/23-9/23	396	84.3	1.1	36	88.6	2.7	437	84.7	1.0
2002	4/29-9/29	474	89.8	1.1	63	87.6	2.3	537	89.5	1.0
2003	4/28-9/28	596	90.4	0.9	111	90.8	1.8	712 ^e	90.6	0.8
2004	4/26-9/26	521	91.3	1.0	264	91.0	1.1	786 ^f	91.0	0.7
Gustavus										
2002	6/03-9/15	281	101.7	1.5	1,043	115.2	0.8	1,328 ^g	112.3	0.7
2003	5/05-9/14	320	102.0	1.1	2,052	114.5	0.5	2,372 ^h	112.8	0.4
2004	5/10-9/12	338	101.0	1.2	2,224	114.0	0.4	2,563 ⁱ	112.3	0.4
Totals ^j										
1998		785	93.6	0.9	842	100.0	0.8	1,687	96.7	0.6
1999		836	91.3	0.9	2,004	89.9	0.5	2,853	90.3	0.4
2000		1,976	91.1	0.6	2,909	94.7	0.4	4,887	92.7	0.3
2001		997	87.1	0.7	2,007	94.0	0.4	3,011	91.7	0.4
2002		1,649	91.8	0.6	3,759	99.5	0.4	5,413	97.1	0.3
2003		2,308	89.5	0.4	4,834	101.4	0.3	7,150	97.6	0.2
2004		2,475	90.0	0.4	5,866	98.3	0.3	8,350	95.8	0.3

^a Two halibut lengths (71.0 and 84.0 cm) from Ketchikan with unknown angler type.

^b Includes one halibut length with unknown angler type.

^c Includes three halibut with unknown angler type.

^d Includes seven halibut with unknown angler type.

^e Includes five halibut with unknown angler type.

^f Includes one halibut with unknown angler type.

^g Includes four halibut with unknown angler type.

^h Includes 382 lengths sampled at Elfin Cove.

ⁱ Includes 469 lengths sampled at Elfin Cove.

^j Represents the unweighted average of all length data collected in Area 2C each year. Not a true representation of average regional lengths.

Table 6.-Estimated average net weight (lb) for Pacific halibut sampled during on-site surveys in IPHC Area 2C by non-chartered and chartered user groups from 1998 to 2004.

Port/Year	Survey Period	Non-Chartered			Chartered			Overall			
		n	Avg. Net Wt. (lb)	SE	n	Avg. Net Wt. (lb)	SE	n	Avg. Net Wt. (lb)	SE	
Ketchikan											
	1998 4/27-9/27	178	17.4	1.7	105	13.8	0.6	302	16.4	1.1	
	1999 4/26-9/26	242	21.5	1.3	83	23.2	2.1	325	21.9	1.1	
	2000 4/24-9/24	337	25.2	1.3	682	24.1	0.8	1,021 ^a	24.5	0.7	
	2001 5/07-9/23	322	19.6	1.1	1,127	21.4	0.5	1,450	21.0	0.5	
	2002 4/29-9/29	411	18.4	1.0	1,428	21.8	0.6	1,840 ^b	21.0	0.5	
	2003 4/30-9/28	264	14.9	1.0	169	17.1	1.5	433	15.7	0.8	
	2004 4/26-9/26	466	16.8	0.9	489	20.7	0.9	955	18.8	0.6	
Craig/Klawock											
	1998 4/27-9/13	82	20.5	2.2	15	29.1	12.7	97	21.8	2.7	
	1999 4/26-9/12	133	21.2	3.0	451	12.1	0.6	584	14.2	0.8	
	2000 4/24-9/10	383	15.9	0.9	950	13.4	0.5	1,333	14.1	0.4	
	2001 5/07-9/09	134	15.4	1.6	293	12.8	0.8	427	13.6	0.7	
	2002 5/06-9/15	149	14.0	1.3	408	11.2	0.6	557	12.0	0.6	
	2003 5/05-9/14	385	10.9	0.5	635	10.9	0.5	1,020	10.9	0.4	
	2004 5/03-9/12	408	13.1	0.7	1,525	11.8	0.3	1,933	12.1	0.3	
Sitka											
	1998 4/27-9/27	48	20.0	3.2	345	31.0	1.9	407	29.5	1.7	
	1999 4/26/-9/26	101	17.6	2.7	982	20.8	0.8	1,089	20.5	0.7	
	2000 4/24-9/24	120	22.5	2.3	410	23.3	1.4	530	23.1	1.2	
	2001 4/23-9/23	90	16.2	2.3	463	20.4	1.1	554	19.7	1.0	
	2002 4/29-9/29	202	20.7	1.7	621	22.2	1.1	823	21.9	0.9	
	2003 4/28-9/28	189	14.0	1.0	1193	20.3	0.6	1,385 ^c	19.4	0.6	
	2004 4/26-9/26	135	17.3	2.1	550	21.9	1.2	692 ^d	21.0	1.0	
Petersburg/Wrangell											
	1998 5/04-7/12	66	33.0	3.5	48	49.9	5.7	114	40.1	3.2	
	1999 5/03-7/11	68	23.8	2.4	82	37.4	3.7	150	31.3	2.4	
	2000 4/24-9/10	725	20.4	0.8	718	27.6	0.9	1,443	24.0	0.6	
	2001 4/30-7/08	55	18.1	2.6	88	31.2	2.0	143	26.2	1.7	
	2002 5/06-7/07	132	22.9	1.7	196	35.8	2.7	328	30.6	1.8	
	2003 5/02-9/14	554	20.3	0.9	674	25.8	0.7	1,228	23.3	0.6	
	2004 5/03-9/12	607	18.1	0.6	814	22.3	0.5	1,421	20.5	0.4	
Juneau											
	1998 4/27-9/27	411	21.7	1.1	329	20.5	0.6	767	21.1	0.6	
	1999 4/26-9/26	292	20.2	1.4	406	13.0	0.4	705	16.0	0.6	
	2000 4/24-9/24	411	19.5	1.2	149	15.8	0.8	560	18.5	0.9	
	2001 4/23-9/23	396	15.3	0.8	36	15.8	1.6	437	15.3	0.8	
	2002 4/29-9/29	474	19.6	1.1	63	16.1	1.8	537	19.2	1.0	
	2003 4/28-9/28	596	19.1	0.9	111	18.1	1.3	712 ^e	19.0	0.8	
	2004 4/26-9/26	521	19.2	0.9	264	17.5	0.9	786 ^f	18.6	0.6	
Gustavus											
	2002 6/03-9/15	281	27.1	1.5	1,043	38.7	0.9	1,328 ^g	36.2	0.8	
	2003 5/05-9/14	320	25.9	1.1	2,052	37.3	0.6	2,372 ^h	35.8	0.6	
	2004 5/10-9/12	338	25.8	1.2	2,224	36.0	0.5	2,563 ⁱ	34.6	0.5	
Totals ^j											
	1998	785	21.5	0.8	842	25.8	1.0	1,687	23.6	0.6	
	1999	836	20.7	0.9	2,004	18.0	0.5	2,853	18.8	0.4	
	2000	1,976	20.3	0.5	2,909	20.9	0.4	4,887	20.7	0.3	
	2001	997	16.9	0.6	2,007	20.2	0.4	3,011	19.1	0.3	
	2002	1,649	20.5	0.6	3,759	26.1	0.4	5,413	24.3	0.4	
	2003	2,308	18.1	0.4	4,834	26.9	0.4	7,150	24.0	0.3	
	2004	2,475	18.3	0.4	5,866	24.4	0.3	8,350	22.6	0.2	

^a Includes two halibut weights (net wt. 6.9 and 11.9 lbs.) from Ketchikan with unknown angler type.

^b Includes one halibut length with unknown angler type.

^c Includes three halibut with unknown angler type.

^d Includes seven halibut with unknown angler type.

^e Includes five halibut with unknown angler type.

^f Includes one halibut with unknown angler type.

^g Includes four halibut with unknown angler type.

^h Includes 382 lengths sampled at Elfin Cove.

ⁱ Includes 469 lengths sampled at Elfin Cove.

^j Represents the unweighted average of all length data collected in Area 2C each year. Not a true representation of average regional lengths.

Table 7.– Length frequency distributions of Pacific halibut sampled in IPHC Area 2C ports by on-site surveys for combined, charter, and non-charter user groups during 2004.

	Length Interval (cm)	Ketchikan		Craig/ Klawock		Sitka		Petersburg/ Wrangell		Juneau		Gustavus/ Elfin Cove	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Combined	<55	2	(0)	11	(1)	0	(0)	3	(0)	3	(0)	2	(0)
	60	28	(3)	177	(9)	35	(5)	31	(2)	23	(3)	7	(0)
	70	147	(15)	578	(30)	114	(17)	114	(8)	111	(14)	42	(2)
	80	269	(28)	610	(32)	214	(31)	263	(19)	220	(28)	170	(7)
	90	224	(23)	339	(18)	135	(20)	353	(25)	166	(21)	288	(11)
	100	127	(13)	117	(6)	55	(8)	311	(22)	107	(14)	544	(21)
	110	47	(5)	36	(2)	29	(4)	165	(12)	63	(8)	430	(17)
	120	31	(3)	19	(1)	17	(2)	79	(6)	44	(6)	422	(17)
	130	29	(3)	12	(1)	26	(4)	49	(3)	18	(2)	319	(13)
	140	15	(2)	12	(1)	24	(4)	26	(2)	8	(1)	168	(7)
	150	16	(2)	11	(1)	15	(2)	11	(2)	7	(1)	87	(3)
	160	11	(1)	5	(0)	8	(1)	12	(1)	7	(1)	42	(2)
	>165	9	(1)	6	(0)	13	(2)	4	(0)	8	(1)	41	(1)
Totals		955	(100)	1,933	(100)	685	(100)	1,421	(100)	785	(100)	2,562	(100)
Charter	<55	0	(0)	8	(1)	0	(0)	0	(0)	1	(0)	0	(0)
	60	6	(1)	142	(9)	24	(4)	5	(1)	3	(1)	1	(0)
	70	37	(8)	461	(30)	82	(15)	24	(3)	29	(11)	21	(1)
	80	138	(28)	501	(33)	183	(33)	125	(15)	85	(32)	115	(5)
	90	142	(29)	258	(17)	104	(19)	227	(28)	61	(23)	224	(10)
	100	69	(14)	85	(6)	41	(7)	209	(26)	36	(14)	467	(21)
	110	29	(6)	23	(2)	27	(5)	106	(13)	24	(9)	393	(18)
	120	16	(3)	12	(1)	13	(2)	50	(6)	13	(5)	396	(18)
	130	19	(4)	9	(1)	22	(4)	34	(4)	8	(3)	297	(13)
	140	13	(3)	7	(0)	21	(4)	14	(2)	1	(0)	155	(7)
	150	10	(2)	9	(1)	14	(3)	10	(1)	1	(0)	82	(4)
	160	6	(1)	5	(0)	7	(1)	9	(1)	0	(0)	37	(2)
	>165	4	(1)	5	(0)	12	(2)	1	(0)	2	(1)	36	(2)
Totals		489	(100)	1,525	(100)	550	(100)	814	(100)	264	(100)	2,224	(100)
Non- charter	<55	2	(0)	3	(0)	0	(0)	3	(0)	2	(0)	2	(1)
	60	22	(5)	35	(0)	11	(8)	26	(4)	20	(4)	6	(2)
	70	110	(24)	117	(18)	32	(24)	90	(15)	82	(16)	21	(6)
	80	131	(28)	109	(46)	31	(23)	138	(23)	135	(26)	55	(16)
	90	82	(18)	81	(22)	31	(23)	126	(21)	105	(20)	64	(19)
	100	58	(12)	32	(9)	14	(10)	102	(17)	71	(14)	77	(23)
	110	18	(4)	13	(2)	2	(1)	59	(10)	39	(7)	37	(11)
	120	15	(3)	7	(1)	4	(3)	29	(5)	31	(6)	26	(8)
	130	10	(2)	3	(0)	4	(3)	15	(2)	10	(2)	22	(7)
	140	2	(0)	5	(0)	3	(2)	12	(2)	7	(1)	13	(4)
	150	6	(1)	2	(0)	1	(1)	1	(0)	6	(1)	5	(1)
	160	5	(1)	0	(0)	1	(1)	3	(0)	7	(1)	5	(1)
	>165	5	(1)	1	(1)	1	(1)	3	(0)	6	(1)	5	(1)
Totals		466	(100)	408	(100)	135	(100)	607	(100)	521	(100)	338	(100)

Table 8.— Summary of disposition (Whole or Cleaned-At-Sea (CAS)) of harvested halibut brought back to port by charter and non-charter anglers as indicated by the creel survey data at the various ports in IPHC Area 2C during 2004.

Port	Angler Type	Total Number of Halibut Kept	Number brought back whole to dock	Percent	Number brought back whole to dock and sampled	Percent	Number Cleaned at Sea (CAS)	Percent
Ketchikan	Non-charter	659	519	79%	316	61%	133	20%
	Charter	328	255	78%	105	41%	66	20%
	Combined	987 ^a	774	78%	421	54%	199	20%
Craig/Klawock	Non-charter	708	644	91%	378	59%	64	9%
	Charter	1,431	1,418	99%	962	68%	13	1%
	Combined	2,141	2,064	96%	1,340	65%	77	4%
Sitka	Non-charter	554	114	21%	99	87%	437	79%
	Charter	5,498	585	11%	405	69%	4,896	89%
	Combined	6,052 ^b	699	12%	504	72%	5,333	88%
Petersburg/ Wrangell	Non-charter	1,196	1,072	90%	614	57%	123	10%
	Charter	1,168	1,056	90%	742	70%	97	8%
	Combined	2,390 ^c	2,154	90%	1,369	64%	220	9%
Juneau	Non-charter	1,442	773	54%	282	36%	643	45%
	Charter	285	146	51%	75	51%	126	44%
	Combined	1,727 ^d	919	53%	357	39%	769	45%
Gustavus/Elfin Cove	Non-charter	282	215	76%	182	85%	67	24%
	Charter	2,886	2,142	74%	1,437	67%	715	25%
	Combined	3,171 ^e	2,360	74%	1,619	69%	782	25%
Total ^f	Non-charter	4,841	3,337	69%	1,871	56%	1,467	30%
	Charter	11,596	5,602	48%	3,726	67%	5,913	51%
	Combined	16,468	8,970	54%	5,610	63%	7,380	45%

^a Includes 7 halibut caught by non-charter anglers and 7 caught by charter anglers with unknown status (whole or CAS).

^b Includes 1 halibut caught by non-charter anglers and 17 caught by charter anglers with unknown status (whole or CAS).

^c Includes 13 whole sampled and 13 whole not sampled from unknown anglers.

^d Includes 26 halibut caught by non-charter anglers and 1 caught by charter anglers with unknown status (whole or CAS).

^e Includes 3 whole halibut that were kept and not sampled by unknown angler type.

^f Represents the unweighted totals of onsite interview data collected in Area 2C in 2004. Not a true representation of average regional percentages.